Applying The Section 404 Permit Process To Federal-Aid Highway Projects

IMPROVING INTERAGENCY COORDINATION ON FEDERAL-AID HIGHWAY PROJECTS

AND

INTEGRATING THE NATIONAL ENVIRONMENTAL POLICY ACT AND SECTION 404 REQUIREMENTS

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U.S. Environmental Protection Agency
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Washington, D.C.

September 1988

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INTRODUCTION

Over the past 15 years, Federal legislation, Executive Orders, and subsequent regulation have caused major changes in many aspects of environmental protection. One important change is the now commonplace requirement for agency and public interaction in the decisions leading to government-sponsored projects affecting the environment. Interaction is particularly important whenever agencies propose projects that will affect environmental resources such as air, water, lands, and wildlife. Acting as trustees of these resources, agencies must ensure through interaction that all actions of the Federal Government include appropriate consideration and protection of the public interest. Protection of many resources, such as floodplains and wetlands have become national priorities.

The National Environmental Policy Act of 1969 (NEPA) prescribes coordination and interaction among agencies. Numerous other environmental statutes reflect this element of NEPA by requiring Federal agencies to actively seek comments from all interested organizations when proposing projects. One such statute, reflecting a national concern to abate water pollution, is the Clean Water Act of 1977, as amended (CWA). The primary objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (lakes, wetlands, streams, and other aquatic habitats). Under Section 404 of the CWA, projects involving the discharge of dredged or fill material into waters of the United States require a permit issued by the U.S. Army Corps of Engineers (COE) or a State that has assumed the program. The COE conducts a public interest review and a Section 404(b)(1) Guidelines compliance determination before deciding whether to issue a permit. The decision is based on an evaluation of impacts and whether the proposal is in the public interest. The comments and cooperation of many agencies and the public are essential to the review.

Many Federal-aid highway projects require Section 404 permits. Therefore, the Federal Highway Administration (FHWA), the State highway agencies (SHAs), and the commenting agencies must recognize that early and continued coordination is imperative to address issues that may affect the processing of permit applications.

Effective coordination, however, is not always a simple task. Both lead and commenting agencies find that the efforts required for good coordination often severely tax available time and personnel resources. In addition, basic policy differences between agencies can hinder the resolution of controversial issues. Consequently, many agencies involved in the Section 404 permitting process see a need for more effective communication and better understanding of legislative roles and responsibilities.

Recognizing this need, the principal Federal agencies involved in the assessment of Section 404 permit applications for Federal-aid highway projects formed a work group in September 1985 to identify methods for improving interagency coordination. The agencies in the work group are the U.S. Fish and Wildlife Service (FWS), Environmental Protection Agency (EPA),

National Marine Fisheries Service (NMFS), COE, and the FHWA. The work group placed particular emphasis on surfacing innovative and cost-effective approaches that could help field offices do their jobs faster and better. This document summarizes the results of that effort.

The purpose of the document is to identify methods of improving coordination before and during the processing of Section 404 permits on Federal-aid highway projects. The guidance should be useful to the personnel of Federal agencies reviewing permits, and to employees of State or local agencies either applying for permits or commenting on permit applications.

As guidance, this document is not prescriptive and does not establish new policy or modify existing agency policies. Instead, it introduces a range of ideas for making the interagency coordination on Section 404 permits more effective. Examples have been used to illustrate these concepts and contacts are provided where further information may be obtained. As such, the document does not address all the issues and requirements which can affect Section 404 processing. Apart from coordination, permit applicants should recognize that a project must comply with all applicable statutes, regulations, and Executive Orders. Although this document focuses on federally assisted highway projects, the coordination techniques would also be valuable for use on State-funded actions requiring Section 404 permits.

The document is divided into three sections, i.e., programmatic activities, project-specific activities, and the integration of NEPA and Section 404. Although the subject matter falls into these three categories, the chapters are independent discussions. The development of new and innovative techniques that can improve agency coordination are encouraged and will be incorporated into subsequent editions of this document. To facilitate revision, the document is in loose-leaf form.

Programmatic Activities (Chapters 1-4)

Although Section 404 permit applications are typically prepared for single projects, many factors transcend these individual actions and apply to an entire program of activities. Agencies may find it more appropriate to address such issues on a programmatic basis rather than in the context of a single permit action.

A programmatic approach offers a number of advantages. First, it allows the affected agencies to explore and seek resolution of broad issues that could benefit a large number of actions. Thus, time can be saved in the long run by eliminating the need to repeatedly address the same issues over and over again on individual permits. Second, issues can be discussed and resolved before they cause critical disagreement or time delays on a specific project. Finally, these activities provide an opportunity for agencies to better understand each other's processes and policies.

Resolution of issues is not the only benefit of coordination. There is a benefit to the professional exchange of technical information among

biologists, planners, and engineers working throughout the government. Coordination allows opportunities for these personal exchanges as well as the exchange of research results and other technical information.

The four programmatic approaches presented in this document are useful vehicles for improving the effectiveness of interagency coordination. However, programmatic techniques cannot always resolve unique, project specific issues arising on individual permit applications. The second section of this document is directed at these project-oriented approaches to coordination.

Project-Specific Activities (Chapters 5-10)

During the development of an individual highway project, many opportunities exist for coordination and resolution of Section 404 permit issues. Agency decisionmakers should recognize and act on the opportunities that produce the most effective coordination results. This requires an understanding of the Federal-aid highway development process, as well as the elements of effective coordination.

The Federal-aid highway program is a federally assisted, State administered program. The States, in cooperation with local governments, establish priorities for meeting their current and future transportation needs through a continuous and comprehensive planning process. From these priorities, States develop concepts for highway projects and identify projects which will be programmed for development using Federal assistance. Once the FHWA has approved a project as programmed, a State can continue with project development including environmental studies and initial design. Subject to various approvals throughout the process, the State eventually completes environmental analyses, design, acquires necessary rights-of-way, and proceeds to construction. As the SHA performs work and expends funds, the FHWA reimburses the State for eligible project costs including those incurred for environmental and other planning studies, design, construction, and approved mitigation measures.

The process used to develop Federal-aid projects varies somewhat among the States. However, all variations have certain elements in common. The figure on page vi presents a generalized version of the development process from early planning through the completion of environmental analyses and subsequent actions. Initially, State and local planning agencies identify the project concept and objectives. The next three steps in the highway development process happen concurrently:

- coordination with other agencies occurs to identify social, economic, and environmental constraints, including potential Section 404 issues;
- major design features are explored and preliminary alternatives proposed recognizing those constraints; and
- detailed studies identify the impacts of each alternative on project area resources.

These early steps of project development offer key opportunities to involve the technical expertise of the commenting agencies and to integrate area-wide resource maps, data bases or other information into the evaluation of feasible alignments. During this time, the lead and resource agencies should consider Section 404 concerns regardless of when the SHA plans to apply for the permit. Early integration of Section 404 concerns into highway project development can assure that issues arise when there is maximum opportunity to resolve them.

The final three steps occur sequentially (see page vi) as the results from the previous work are incorporated into an environmental document which is made available to the public and commenting agencies. After comments are considered and public involvement occurs, a selected alternative is chosen. Joint public involvement and other timesaving communication techniques can be used in these steps.

Integrating NEPA and Section 404 (Chapter 11)

Programmatic and project-specific approaches to coordination can culminate in opportunities to combine the development of Section 404 permit applications with the processing of environmental documents under NEPA. Chapter 11 explores these opportunities and closes the guidance document with a technique to integrate the Section 404 and NEPA processes. The technique describes information and coordination prerequisites necessary for early and more timely consideration of Section 404 permitting concerns. Use of this technique could result in a Section 404 permit being issued as early as the approval of the final project NEPA document.

An Abbreviated Model of
The Federal-aid Highway Development Process

Steps	Opportunities for Coordination
1. IDENTIFY PROJECT CONCEPT AND OBJECTIVES	- Initiate coordination - Identify cooperating agencies
2. IDENTIFY SOCIAL, ECONOMIC, AND ENVIRONMENTAL CONSTRAINTS	- Coordinate with agencies to identify resources and problem issues in project study area - Assess the viability of the "no-build" alternative - Establish study techniques and tentative level of NEPA documentation
3. DEVELOP PRELIMINARY ALTERNATIVES	- Define preliminary location and design features or issues
4. ANALYZE THE IMPACTS OF THE ALTERNATIVES ON SOCIAL, ECONOMIC, AND ENVIRONMENTAL RESOURCES	- Perform field investigations of the alternatives - Determine areas of potential significant impacts of each alternative - Determine if Section 404 permit is needed
5. INCORPORATE ALTERNATIVE ANALYSIS IN THE ENVIRONMENTAL DOCUMENT; MAKE THE DOCUMENT AVAILABLE FOR COMMENT	- Document interagency coordination - Offer the public the opportunity for comment - Hold public hearings
6. INCORPORATE COMMENTS INTO THE SELECTION OF A PREFERRED ALTERNATIVE;	- Agency comments will also focus on Section 404 issues - Refine the design details to respond to substantive issues - Make final documents available for comment

7. ISSUE THE RECORD OF DECISION OR FINDING OF NO SIGNIFICANT IMPACTS (FONSI) AND CONTINUE WITH DEVELOPMENT	- Send copy to commenting agencies, as appropriate
8. COMPLETE DESIGN AND DETERMINE REQUIRED RIGHTS-OF-WAY	- Coordinate with commenting agencies, as needed
9. ACQUIRE NECESSARY RIGHTS-OF-WAY	
10. RECEIVE FINAL AUTHORIZATION TO PROCEED TO CONSTRUCTION	- Review project proposal and coordinate with commenting agencies, if necessary
11. CONSTRUCTION OF PROJECT AND IMPLEMENTATION OF APPROPRIATE MITIGATION MEASURES	- Coordinate with commenting agencies, as necessary

PROGRAMMATIC TECHNIQUES

CHAPTER 1

PROGRAMMATIC APPROACHES

Programmatic techniques can solve recurring problems affecting all actions or a group of actions (permits, designs, or decisions). This diverse group of techniques includes, for example: nationwide permits, categorical exclusions, mitigation banking, best management practices, special area management plans, and advanced identification of sensitive and non-sensitive areas. These techniques help to keep problems from resurfacing with each new action or project. In particular, programmatic techniques such as nationwide permits allow agencies to efficiently exercise an effective and sensitive consideration of environmental factors when many small projects are processed.

Programmatic techniques can be used at both the national and field office levels. For example, the COE uses regional and general permits to regulate large numbers of minor activities without the major expenditure of Federal resources (dollars and manpower) required for case-by-case evaluations. At the field office level, some individual COE districts participate in Special Area Management Plans. Programmatic approaches at the field level enable agencies to allow for regional variations. Programmatic techniques can have the following advantages:

- o savings of agency time, money, and resources,
- o more effective and sensitive environmental processing,
- o clarification of agency policies and processes, and
- o more predictable coordination.

Discussion

Because recurring problems can be difficult to identify at the national level, programmatic techniques are often most effective when developed and put into place by Federal agency field offices and SHAs. Locally developed techniques can most easily adapt to the variation among field offices with respect to resources and unique project development processes. In addition, field offices often find it easier to agree because there are fewer steps leading to approval. However, some programmatic approaches are useful at the national level, particularly when they result from similar techniques developed by more than one field office. Therefore, operating and management staff at all levels should be alert to identify problems best solved by a programmatic approach.

Many of the other techniques discussed in following chapters of this document can be the subjects of programmatic techniques. In particular, the techniques discussed in Chapter 11, "Permit Considerations During the NEPA Process," are good examples of national programmatic problem solving.

As suggested in Chapter 11, agencies can conduct more rigorous interagency coordination on Section 404 issues during the NEPA process. This could result in a time savings and the elimination of the need for a duplicative effort during a separate permit evaluation process.

How Does It Work?

Resolution of a programmatic problem offers potentially great benefits for both the sponsoring agency and the other agencies affected by the problem (SHA and other Federal agencies). Development of a programmatic approach can require commitments of agency staff resources commensurate with the rewards. A challenging time schedule for completion helps focus efforts. A programmatic approach can take many forms to fit the scope of the problem, ranging from informal agreements to a published plan. Implementation of a programmatic technique usually requires a joint effort by the sponsoring agency, the SHA, and other affected Federal agencies.

Some examples of programmatic agreements are discussed below. See Chapter 11, for a discussion of advanced identification of sensitive and non-sensitive areas.

1. **Categorical Exclusions.**

   The COE can accept another Federal agency's categorical exclusions as qualifying for a nationwide permit. Under this programmatic approach, the COE reviews the agency's categorical exclusion provisions and determines which types of actions are unlikely to result in more than minor individual and cumulative impacts to aquatic resources severe enough to warrant an individual permit review. The COE accepts certain categories of action under the nationwide permit and requires individual permits for others. The COE can also impose whatever procedural safeguards it deems warranted to protect aquatic resources. For example, the COE requires that the Federal agency notify the COE District prior to proceeding with actions that otherwise qualify for a nationwide permit. The nationwide permit for categorical exclusions is defined in 33 CFR 330 (5)(a)(23).

2. **Regional Permits.**

   The COE Norfolk District has issued a Regional Permit for the Virginia Department of Transportation's projects in the waters of the United States. Representatives of the Virginia Department of Transportation, State resource agencies, the FHWA, the FWS, the NMFS, the EPA, and the COE discuss proposed highway projects at regularly scheduled coordination meetings. When there are no objections to a proposed project or when agency recommendations have been incorporated into the final project plan, a list of those projects is sent to the agencies. If the agencies do not respond within 15 days of receipt, then the comments are considered final and the projects may proceed under the Regional Permit. When objections cannot be resolved, an individual permit is required.

The Regional Permit contains standard conditions which protect most agencies' interest. Special conditions may be incorporated into the projects prior to approval under the Regional Permit. Periodic coordination meetings are used to explain the projects and discuss any necessary special conditions. Project planning and development under a Regional permit can save considerable time compared to processing an individual permit.

3. **Abbreviated Processing Procedures.**

Under 33 CFR 325.2(e)(1), COE Division and District offices may use abbreviated processing procedures (APP) to permit activities with Letters of Permission. The COE Alaska District currently uses this process for oil and gas activities on the North Slope. The District is also considering using APP for highway projects in Alaska. The process places considerable emphasis on early and continued coordination. The procedures require the applicant to hold a pre-application meeting and to provide a copy of the permit application to the resource agencies when submitted to the COE. If the applicant resolves all substantive concerns during the pre-application process, the COE Alaska District will issue a permit within 30 days of receiving the application.

4. **Additional Conditioning of Nationwide Permits at the COE District Level.**

The COE Norfolk District, for example, has established additional Regional conditions for the use of Nationwide Permit 12 (discharge of material for backfill or bedding for utility lines) through a public notice [33 CFR 330.5(a)(12)]. The conditions describe how excavated material may be temporarily stockpiled in a wetland area. Time limits for temporary stockpiling are also set in the Regional conditions.

5. **Best Management Practices (BMPs).**

Programmatic aspects of BMPs consist of the routine consideration of potential environmental effects of all parts of highway construction and maintenance, as well as, practical modifications that are intended to reduce or eliminate adverse effects. Usually, there are site-specific ways to undertake the structural and non-structural aspects of highway construction, operation, and maintenance, to reduce or prevent adverse environmental impacts to natural resources. Methods, measures, or practices to prevent, reduce, or correct degradation of aquatic habitats can be developed in the planning stage and applied during project construction and maintenance. Use of BMPs can often satisfy the concerns of resource agencies and individuals regarding environmental aspects such as water circulation, fill, sediment loading, timing, staging areas, pollution control, buffer zones, etc. The BMPs precede and usually are carried out, where possible, in conjunction with other mitigation actions. Standard construction specifications, such as

erosion control practices, are examples of BMPs commonly used on highway projects. Construction contracts should cite the use of such practices and include provisions for periodic inspection and maintenance of all measures used on the project.

6. **Wetland Mitigation Banking.**

Wetland banking is an experimental, programmatic approach which could be appropriate for highway project planning and development. In mitigation banking, the project sponsor typically restores, enhances, or creates wetland areas in order to "bank" fish and wildlife habitat or the other wetland values. The wetland values may be determined with various evaluation procedures (see Chapter 9). Evaluation procedures help to identify wetland resource values impacted by a project that can be replaced with equally valued wetlands available from the bank. Typically, a wetland bank is established and operated through a contractual Memorandum of Agreement (MOA) between the action, regulatory, and resource agencies. The primary purpose of the MOA is to document the existing resource values in the bank, as well as the increased habitat values that can be obtained through enhancement measures. However, the MOA would also describe agency responsibilities (e.g., maintenance of a bank and its wetland value is typically the responsibility of a state resource agency) and the appropriate justification necessary for using the bank as an off-site mitigation measure. Restoration, enhancement, or creation of the banked wetlands should generally preceed the wetland losses to be compensated, thereby providing a higher level of confidence in the success of mitigation. The "payoff" for the action agencies is that an adequate mitigation capability exists independent of individual projects. Under the MOA, the SHAs can arrange to debit the "account" rather than authorizing or funding a new mitigation activity for each project. This is particularly helpful when numerous individual projects require mitigation of wetland resource values. Through wetland banking, a SHA may be able to group a number of individual mitigation actions so as to enhance wetland values beyond the existing values at the scattered, individual project sites.

7. **Special Area Management Plans (SAMPs).**

The COE has used SAMPs to identify places within a defined geographic area which are or are not allowable for certain activities such as disposal sites or development. Written jointly by Federal, State, and local agencies, a SAMP consists of detailed statements of policies, standards and criteria guiding public and private development plus specific mechanisms for implementation. Thus, SAMPs are like comprehensive plans and provide for natural resource protection and reasonable development, including highway projects. The SAMPs help avoid the problems often associated with case-by-case environmental review.

Implementation of a SAMP will be through an interactive system of local, State, and Federal controls and a COE general permit or expedited individual permits. Controls can include local zoning, State permit restrictions, or conditioning and Federal restrictions such as those falling under Section 404(c) (40 CFR 231). See COE Regulatory Guidance Letter 86-10 dated October 2, 1986, on Special Area Management Plans (SAMPs). The following conditions should be present when agencies undertake a SAMP:

- o An appropriate area whose problems warrant a collective, interagency effort. One highway project in a sensitive area will probably not make a SAMP worthwhile, but several may justify the effort because of current or anticipated growth and development.

- o A local agency to sponsor the SAMP so it is not viewed as an intrusion by Federal or State Governments.

- o Willingness to provide data and to accept or limit some development on the part of the resource agencies and developmental interests.

- o Willingness by all appropriate agencies to support the SAMP with a useful regulatory enforcement mechanism.

8. **Denial or Restriction of Disposal Sites**

Section 404(c) of the CWA gives the Administrator of EPA authority to prohibit or withdraw the specification of a site as a disposal site or to deny or restrict use of a disposal site. Section 404(c) authority may be exercised before a permit is applied for, while an application is pending, or after a permit has been issued. In each case, the Administrator may prevent any defined area in waters of the United States (including wetlands) from being specified as a disposal site, or may simply prevent the discharge of any specific dredged or fill material into a specified area.

CHAPTER 2

THRESHOLDS FOR COORDINATION

Coordination thresholds are formal and informal decision points which allow agencies to quickly identify the level of interaction necessary to effectively proceed with a project through the planning and development process. Thresholds, in effect, help agencies to avoid wasting resources on unneeded coordination and, at the same time, to ensure that interaction is adequate when necessary. Agencies use thresholds internally to prepare for coordination and externally when requesting other agencies to coordinate.

Effective thresholds are based on information commonly available early in project planning and development. For example, when early environmental studies indicate potential impacts to wetland resources, the sponsoring agency should emphasize early interaction with the resource agencies. Early contact initiated by the information-based threshold, can reduce eventual problems over mitigation and other permit issues. Additional thresholds can reflect other resource characteristics and project features. Each threshold triggers a course of action necessary to address the issue of concern. Thus, where effective coordination thresholds are in place in the project planning and development process, controversy and delay can be substantially reduced.

Discussion

Thresholds make coordination under Section 404 more efficient and effective. They can help busy lead and resource agencies to focus their coordination efforts on projects which warrant attention. For example, an appropriate internal threshold for response to early coordination letters can help a resource agency to avoid responding with "laundry lists" of agency concerns. Instead, the agency may send standardized letters indicating low levels of concern for appropriate projects and detailed letters for projects of concern (See Chapter 5, Scoping). Thresholds which are mutually understood and agreed upon promote trust and understanding among agencies. Finally, a threshold for coordination can incorporate scientific understanding into administrative requirements for coordination when the threshold is based on scientific knowledge or considerations.

How Does It Work?

Thresholds for coordination can be formal or informal. They are most often implemented at the local level. Agencies can establish formal thresholds either through agreements like a MOA, or through programmatic approaches such as the conditions in nationwide permits. Localized interagency policies or agreements can establish formal thresholds for specific purposes. For example, the Norfolk District of the COE uses stockpiling excavated material longer than 30 days as a threshold for

additional coordination. (See Chapter 1, Programmatic Approaches and Chapter 4, Interagency Agreements). Usually, informal thresholds are used only within an agency as guides for implementing the agency's coordination activity.

Agencies implement thresholds for coordination in a wide variety of ways. Formal written thresholds appear in official documents such as Memoranda of Agreement or letters describing agency policy. Informal thresholds are not publicized officially. However, agencies can often increase the effectiveness of informal thresholds by informally communicating the thresholds to affected agencies. Agencies should also assure that informal thresholds are well understood and consistently used.

Whether a threshold is formal or informal, the focus should be on specifying an easily identified trigger so that agencies can manage the coordination process efficiently and effectively. The amount of resource impacted, kind of resource, its characteristics or conditions, the significance of the resource or its quality are the usual characteristics used as thresholds. Special features such as presence of endangered species, habitats for endangered species or unique resources may be used as thresholds. Degree of public controversy or agency concern can be used formally or informally to trigger coordination. Other thresholds are processing time limits, statutory mandates and other constraints.

The following list is an example of possible project area features that could trigger additional coordination requirements related to Section 404 issues. The list is not all inclusive. Many additional features as well as subcategories are possible. Whenever a SHA is creating its own list of thresholds, it should coordinate with the resource agencies to ensure a mutual understanding of the triggering conditions and to identify who will be contacted to initiate the interaction.

Possible threshold conditions in a project area:

1. State or Federal threatened and endangered species
2. Species of high interest to State or Federal agencies
3. Migratory waterfowl habitat
4. Anadromous fish habitat
5. Trout and other cold-water fish habitat
6. Habitat for birds of prey
7. Wetland habitat
8. Riparian habitat
9. Migratory corridors

10. Wintering areas and other critical feeding sites

11. Important reproductive habitats

12. Public water supplies, including important aquifers

13. Islands and other coastal barriers

14. Hazardous waste sites

15. Regulatory floodways and other floodplain areas

16. Commercial fish and shellfish production areas

17. Important sport fishing areas

18. Highly erosible soils

19. Listed or proposed wild and scenic rivers

20. Navigable waterways

21. Significant historic or archaeological resources

22. Municipal and industrial waste treatment facilities

23. Resource agency holdings or interests, such as refuges, parks and habitat easements

CHAPTER 3

JOINT CONFERENCES AND TRAINING COURSES

Interagency conferences and training courses are forums for transferring information useful for strengthening agency planning and decisionmaking. Direct transfer of information occurs among participants and conference speakers or training instructors. One-on-one interactions probably are the most productive, but small group interactions, open discussions, question and answer sessions, and the lecture format all can contribute substantially to information exchange. Interaction between participants is most common at conferences. The key to a successful conference is a realistic agenda with attainable objectives achieved by resolving specific issues. Training courses usually allow more limited interaction but still provide a group setting in which information presented by the instructors is collectively discussed. In both interagency conferences and training courses, participants collect, interpret, analyze, and evaluate information before using it for agency planning and decisionmaking.

There are three reasons why conferences and training courses produce valuable information. First, it is likely to be acceptable to the agencies because experts and agency staff have interacted to develop and refine the information. Second, interaction at conferences and courses may identify agency policy differences that can form the basis for additional negotiations. Third, these gatherings generate familiarity among key individuals and present agency needs and positions in a problem-solving forum. Also, jointly prepared courses and conferences often minimize agency training and travel costs.

Discussion

Interagency Conferences - Goals of interagency conferences may vary but generally should be to develop a consensus, produce change, confirm a common position, or otherwise contribute information that will support and facilitate planning and decisionmaking. Also, interagency conferences promote mutual confidence in the professionalism of participants from different agencies and should focus on technical information. As such, conferences should be considered working sessions rather than simply the means of disseminating information. While sponsoring agencies should encourage participation from all interested agencies, participation may have to be limited. Key individuals with similar expertise, responsibility, and authority from each participating agency are the nucleus of an effective conference. Agencies sponsoring conferences should invite appropriate, interagency staff who may express either needed factual information or their agency's policy perspectives. Under certain circumstances, public officials, representatives of special interest groups or other interested experts may be invited. Individuals who wish to attend an interagency conference often must use personal initiative. Conferences are sometimes announced through professional journals or newsletters. More frequently interagency conferences are organized and publicized through networks of personal and professional contacts between agencies.

Interagency conferences should have a clear purpose and be carefully thought out with realistic agendas and supporting documentation prepared and distributed in advance. Interaction can be expected to be effective if the attention of participants is focused on points that allow objective evaluation. Participants also need an ample opportunity to think about the technical aspects of problems in advance and obtain data from all sources available to them in order to contribute at their maximum potential.

Interagency Training Courses - Interagency training sessions can result in specialists from different agencies arriving at a common understanding of the material presented at the course including analytical techniques. For example, resolution of issues at a project site is more likely among specialists who have studied wetland delineation together than among specialists with widely differing backgrounds in the subject. Therefore, it is advantageous to invite key individuals from participating agencies to courses that have a bearing on Federal-aid highway projects. Again, attendance at an interagency training course usually requires individual initiative in identifying the course and obtaining authorization to attend. Agencies may wish to develop training plans for employees which feature interagency training to further both individual and organizational goals.

How Does It Work?

Interagency Conferences - Federal agencies sponsor numerous conferences and meetings each year. The following are examples of on-going and past conferences and meetings where Federal agencies have exchanged information and, in some cases, developed common positions on technical subjects relevant to the Section 404 process. Many State, local, and private organizations also participated in these gatherings.

1. Federal Highway Administration Environmental Program Manager Meetings. These meetings are held periodically to dispense new agency policy positions, discuss and resolve controversial or troublesome issues, and exchange ideas for improving the environmental awareness of FHWA's field managers.

2. National Wetland Classification and Inventory Workshop, 1975. Sponsored by the FWS, this workshop was held to develop a new and improved wetland classification system. The first draft of a new system evolved from the meeting.

3. The Mitigation Symposium, 1979. The primary objective of the symposium was to develop strategies for minimizing habitat losses through effective mitigation. Cooperation between agencies was a major theme expressed throughout the meeting.

4. National Wetland Values Assessment Workshop, 1983. This meeting was a first step toward developing a national wetland evaluation methodology. Some of the Nation's foremost wetland scientists gathered with agency personnel to critically assess a new evaluation system.

5. EPA Bottomland Hardwood Workshops, 1984-86. A series of three workshops were used to examine the functions and characteristics of bottomland hardwoods, and cumulative impacts of regulated activities on bottomland hardwood wetlands. These conferences were designed to develop guidance and procedures for effectively protecting bottomland hardwood wetlands under Section 404 of the CWA.

6. Regional and Nationwide Environmental Conferences and Workshops. Many resource and project-sponsoring agencies conduct periodic meetings to keep environmental personnel abreast of new developments, surface problems with implementing environmental programs, and exchange technical information. Opportunities exist at these meetings for inviting outside agency personnel to make presentations and participate, thus, providing an even broader perspective.

7. Seminars, Retreats and Professional Meetings. Agencies and other organizations sponsor many such meetings ranging from brown bag seminars through retreats and chapter meetings of professional societies to formal conferences.

Training Courses - The following organizations and agencies present training courses about environmental, procedural, engineering, and permitting matters. These courses are primarily for personnel of the sponsoring agency; however, they are also open to participants from other agencies as space is available.

1. **The U.S. Army Corps of Engineers, Huntsville, Alabama,** offers a large number of courses on a variety of subjects under its Proponent Sponsored Engineer Corps Training program. Courses on wetlands ecology are taught by experts from the COE Waterways Experiment Station and contractors from other agencies and universities. Information can be obtained from Division Engineer, USAED-Huntsville, ATTN: HNDTD-SB, P.O. Box 1600, Huntsville, Alabama 35807-4301, 205-895-5032, FTS 873-5032.

2. **The U.S. Army Corps of Engineers, Waterways Experiment Station** at Vicksburg, Mississippi, supplies experts to organize and teach courses on wetland ecology and wetland interpretation. These experts support the COE enforcement efforts by on-site interpretations at controversial projects. Information can be obtained from the U.S. Army Corps of Engineers, Waterways Experiment Station (WES-ER-W), Environmental Laboratory, P.O. Box 631, Vicksburg, Mississippi 39180, FTS 542-3983.

3. **The U.S. Fish and Wildlife Service, National Ecology Center** and **Colorado State University's Office of Conference Services** offer courses on habitat evaluation procedures, instream flow, policy analysis and decisionmaking, wetlands ecology, and rapid assessment methods. Information can be obtained from the U.S. Fish and Wildlife Service, National Ecology Center, Fort Collins, Colorado 80526-2899, 303-226-9390, FTS 323-5390.

4. **The National Highway Institute,** the training arm of the FHWA, offers courses on wetland functional assessment, ecology, water quality, environmental planning and documentation, and engineering. Information can be obtained from the National Highway Institute (HHI-22), Federal Highway Administration, 6300 Georgetown Pike, McLean, Virginia 22101, 703-285-2772, FTS 285-2772.

5. **The U.S. Environmental Protection Agency, Office of Water,** has arranged for wetlands training by a wide variety of specialists from the U. S. Army Corps of Engineers, Waterways Experiment Station and the Fish and Wildlife Service in response to requests from EPA Regional personnel. Information can be obtained from the U.S. EPA, Office of Wetlands Protection, 401 M Street, S.W., Washington, D.C. 20460, 202-382-5087, FTS 382-5087.

6. **Universities and Colleges** may offer short courses and summer courses on ecology and other subjects useful to specialists working on Federal-aid highway projects. In order to identify staff capability and available courses, usually it is best to consult experts in the area of interest at a university rather than the university administration.

7. **Professional Societies and Private Interest Groups** often provide state-of-the-art training material and instruction for members and other interested professionals.

CHAPTER 4

INTERAGENCY AGREEMENTS

By establishing ground rules and agency responsibilities, interagency agreements between field offices on specific elements of Section 404 coordination can measurably improve coordination processes at both the national and field staff levels. Such agreements might include a listing of key contacts, the identification of intermediate steps in the coordination process and mechanisms for resolving issues. For example, some State highway agencies have an interagency agreement on the details of coordination under the U.S. Department of Transportation/Corps of Engineers MOA on Section 404 permit processing.

Discussion

Interagency agreements at the field office level improve coordination and avoid misunderstandings and delays during agency planning and decisionmaking processes. Interagency agreements at the national level may only set the operating rules for solving problems of a national scope. Field offices should take the time and effort to develop local agreements about the types of coordination suggested in other Chapters of this guidance document. This is the same philosophy that went into the current agreements (MOAs) between commenting Federal agencies and the COE under Section 404(q). The MOAs require the development of local procedures for discussing issues between the COE and commenting Federal agencies. The goal for local interagency agreements should be to find a process that allows agencies to complete their actions in a timely manner, while relying on larger, often national agreements to define the process for resolving programmatic problems.

Interagency agreements are similar to the programmatic techniques discussed in Chapter 1 in that both resolve generic, but not project-specific issues. Programmatic agreements deal with coordination processes in a broad context while interagency agreements affect specific, limited steps in coordination. Interagency agreements fill out the details of implementing complex coordination processes. They enable the field offices to get coordination under control. Interagency agreements also help field staff avoid reinventing the wheel on coordination for each project with a Section 404 permit application.

How Does It Work?

Interagency agreements are made in the context of each agreeing agency's statutory mandates and internal processes (regulations, policies, standard operating procedures, etc.) that govern the way things are done. A mutual understanding of this framework is essential to the identification and development of agreements.

There are many potential areas for interagency agreement. Some are topics of discussion in other Chapters of this document and include: Thresholds for Coordination, Joint Public Involvement Activities, Scoping, Programmatic

Approaches, and Permit Considerations During the NEPA Process. National policies and regulations often result in differences between agency programs which cause delay and inefficiency. Local policies and operating procedures can also cause interagency problems, and it is in this area that local agreements can have the most dramatic effect. Staff of coordinating agencies may also identify opportunities for effective interagency agreements in the course of interagency meetings such as joint conferences (See Chapter 3, Joint Conferences and Training courses). Agreements have been effective particularly where agencies have a history of not working well together.

In developing local interagency agreements, agencies can analyze procedural problems in terms of "with who," "when," and "how" things are done. Timing of most agency interactions is a critical item and should be considered first. Each agency has its own set of priorities based on internal criteria. Local agreements can identify which priority actions are causing problems and set timeframes and procedures which allow agencies to complete their actions with a minimum of delay. Also, interagency agreements must clearly identify the role and function of each agency. Effective local agreements usually set the action at the lowest level possible. Sometimes during the development of an interagency agreement, the exchange of information itself will solve the problem without a formal agreement.

The format for an interagency agreement should reflect the policies and operating procedures appropriate to resolving the problem. Local agreements can be as informal as verbal agreements; however, a written description of what is agreed on helps retain valuable procedures over time and avoid future procedural questions due to personnel changes, sporadic use, etc. The elements of an adequate agreement include:

- Who is party to the agreement,
- What is agreed on,
- When actions will be taken,
- How parties will maintain contact and how often
- How long the agreement will be in place, and
- How the agreement is to be reviewed, updated, or ended.

The following example interagency agreement was developed and signed by representatives of the Arkansas State Highway and Transportation Department, the FHWA Arkansas Division Office and the COE Memphis, Little Rock, and Vicksburg Districts. Developed to implement the March 1980 MOA between the COE and the U.S. Department of Transportation, it has continued in effect under subsequent MOAs. Interagency agreements should include the signatures of approving officials from each agency. In the case of the Arkansas agreement, approval signatures occurred on a separate cover sheet.

TEXT OF AN EXAMPLE INTERAGENCY AGREEMENT

We agree that under normal conditions the Arkansas Highway and Transportation Department (AHTD) and the Federal Highway Administration (FHWA) will serve as the "lead agency" for highway projects as stated in paragraph 3 of the Memorandum of Agreement (MOA).

The AHTD agreed to make the initial contact with the Corps of Engineers (Corps) as early as possible and still provide an indication of the level of documentation (environmental impact statement, environmental assessment, or categorical exclusion) that they felt was appropriate for the proposed highway project. This early contact will include a brief project description including possible involvement that may require a Section 404 permit. The Corps will concur in the environmental processing proposed where possible and scoping type comments will be provided where appropriate.

The AHTD agreed to try to develop the environmental documentation in a way that addressed the Corps concerns to avoid duplication of effort and save time. The Corps agreed to generally accept the highway environmental documentation and limit their public interest review at the permit stage to the geographical vicinity of the Section 404 involvement. In some isolated cases the Corps may find it necessary to prepare additional environmental documentation. However, the AHTD, as lead agency would be given an opportunity to first provide the information.

The Corps agreed to function as a "cooperating agency" when requested. The AHTD agreed to provide the Corps with "pre-draft" copies for their review and input prior to circulation to other agencies and the general public. The State will also provide an early copy of the final document for Corps review prior to approval and making it available to the public.

The AHTD and Corps agreed to joint hearings whenever practicable and the AHTD will provide enough information to the Corps so that they may begin their "public interest review" in advance of a permit application in certain (i.e., sensitive, controversial, etc.) cases. The AHTD will provide the Corps adequate environmental, geometric, and location information on the preferred alternate which would have the Section 404 involvement. The AHTD public notice for the joint hearings will include the information that the Corps needs for their Public Interest Notice. This was agreed to by the AHTD.

The requirements of paragraph 6(e) will provide the AHTD the opportunity to respond to substantive comments prior to permit approval. Both parties agreed that close coordination and communication will be used to resolve any type of situation described in paragraph 6(e) of the MOA.

The 90 days mentioned in paragraph 6(g) will start at the time of the public notice described in paragraphs 6(c) and 6(d).

PROJECT-SPECIFIC TECHNIQUES

CHAPTER 5

S C O P I N G

Effective scoping can initiate productive early agency cooperation on Section 404 issues. Scoping is the process of determining the range of actions, alternatives, and impacts that will be considered in an environmental impact statement (EIS); similar considerations are necessary for the Section 404 permit evaluation process. Appropriate scoping input from the resource agencies helps the lead agency determine: 1) what issues are important; 2) what level of detail will be necessary for the analysis of impacts; and 3) what appropriate mitigation measures should be evaluated. Several States have developed scoping techniques that improve early coordination for projects requiring a permit under Section 404; other scoping techniques have been proposed but not yet used. The following can reduce the time spent planning and developing projects as well as make projects more acceptable to other agencies and the public.

Authority and References

40 CFR 1501.7 (Scoping) and 40 CFR 1508.25 (Scope), Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act

Discussion

The two major references describing scoping (40 CFR Sections 1501.7 and 1508.25) depict a coordination process rather than a one-time interaction (e.g., phone call, letter or meeting). However, many agencies (Federal, State, and local) usually experience scoping as a one-time interaction and their scoping comments often do not have a level of detail that is of much help to the lead agency. Early and continued involvement in project development is a key ingredient in providing proper scoping input. Early involvement is most easily achieved by maintaining an effective ongoing liaison with other agencies so that upcoming projects are known and discussed in advance. Without the appropriate scoping input, the lead agency has a much more difficult job of determining what issues should be covered and how detailed any impact analyses must be. On the other hand, resource agencies often feel that they do not receive enough information in scoping letters to enable them to comment meaningfully beyond a standard "laundry list" of agency concerns. As a result, environmental documents may be too long, do not address the proper issues, or lack sufficient detail.

Since the lead agency is ultimately responsible for conducting the scoping process, it should promote the following practices:

- o providing sufficient information on the project to commenting agencies
- o initiating early coordination
- o preparing clear requests for information

- o following-up on input from commenting agencies
- o providing opportunity for site visits
- o directing requests for information to an appropriate agency contact.

The commenting agencies and the public have a complementary responsibility to respond appropriately to the lead agency. For example, the resource agencies have a responsibility to provide expert information when requested by the lead agencies or when otherwise interested in a project proposal. The information is most useful to the lead agency if it includes early identification of the relative importance of issues. This will result in some risk that additional, later information on an issue identified as unimportant during scoping will indicate that the issue may be important. This would appear to be an acceptable risk if the issue is then reassessed in light of the later information.

If conducted properly, the concept of scoping should provide a wide variety of inputs to Federal-aid highway proposals. Ideally, the SHA and the FHWA should be aware of, and responsive to, all the issues of potential concern before proceeding further with project planning and development. The following section presents a variety of scoping techniques that can be implemented by the lead agency and the concerned agencies to improve scoping effectiveness.

How Does It Work?

Procedural Techniques for Lead and Concerned Agencies:

1. **Periodic meetings** between the agencies to discuss existing and future projects promote early involvement and better agency liaison. The frequency of occurrence could be determined by project load, the urgency of issues that may lead to potential problems. Either monthly, quarterly, or semiannual meetings could be held as appropriate. Chapter 7 discusses this type of meeting in greater detail. While periodic meetings can provide advanced knowledge of a future project, they do not necessarily replace the coordination meetings required to address specific issues.

2. **Interagency discussion of recurring scoping problems** can be initiated by lead or concerned agencies when they repeatedly encounter inadequate scoping information or input. Agencies may also discuss procedures for dealing with additional information which results in an issue becoming important, when the issue was initially identified as unimportant.

Techniques for Lead Agencies to Provide Adequate Scoping Information:

1. **Individualized scoping letters** focus the request for information to specific project features and the areas where the commenting agency has expertise. Such letters can include specific questions or a questionnaire for the concerned agency. While this is additional

work, it discourages the commenting agency from returning a generic letter identifying numerous environmental issues that may or may not have any relation to the project in question. Individualized letters can be used in conjunction with a general scoping letter which does not request specific information. For example, the EPA has received individualized scoping letters with questions related to project compliance with the Section 404(b)(1) Guidelines and found them helpful in focusing its comments on areas useful to the lead agency.

2. **Detailed scoping packages** prepared by the lead agency help resource agencies comment meaningfully during scoping. These packages need to center around providing good descriptions and maps of both the proposed project and the existing environment. One possible way to achieve this is to prepare a preliminary version of the affected environment and proposed alternative sections of the EIS, and include it in the information package. This material is normally quite straight forward and probably exists in one form or another at this early stage anyway. See Chapter 8 for sources of information and specialized maps.

3. **Followup contact** with the staff of concerned agencies can clarify the specific information sought and whether the concerned agency needs additional information on the project. Contact should be maintained as long as necessary to avoid surprises during the later review of the draft EIS.

4. **Site visits** and communication techniques such as video tapes can efficiently provide concerned agencies with project information essential to making specific scoping comments. See Chapter 7 for additional information on these communication techniques.

Techniques for Concerned Agencies to Provide Adequate Scoping Input:

1. **Thresholds for determining whether to use standardized letters** versus individualized response letters to lead agencies help to focus attention on providing adequate scoping input. See Chapter 2 for a discussion of the use of thresholds.

2. **Adequate project information** is essential to specific, detailed scoping responses. Staff of concerned agencies should seek needed information both within their agency and from the lead agency. See Chapter 8 for information sources such as data bases that could be cited and Chapter 7 for communication techniques such as video tape or conference calls, or contact with participating specialists from counterpart agencies who have made site visits.

3. **Thresholds for important and unimportant issues** can encourage staff of resource agencies to clearly distinguish major from minor concerns when responding to the lead agency's scoping request. See Chapter 2 for a discussion of thresholds.

4. **A description of specific additional coordination** desired during environmental studies should be included in a scoping response, if it is likely that an issue could become important. For example, a resource agency should identify what should be done if an issue becomes important during project planning or development.

CHAPTER 6

JOINT PUBLIC INVOLVEMENT ACTIVITIES

Both the FHWA and the COE have requirements for public involvement which can apply to the same project. Consequently, the public may receive several, independently issued public notices of opportunities to comment or to attend successive public hearings on aspects of the same project. These overlapping activities can burden the public with the necessity of attending multiple hearings on one project. Such involvement activities may unreasonably delay project analyses and development.

There are joint public involvement techniques such as the following which may save as much as a month's time for selected highway projects requiring individual Section 404 permits:

1. A joint notice combining up to four required public notices from the SHA and the COE, or

2. Combination of public involvement processes with a joint SHA/COE public hearing.

Additionally, the COE may observe a SHA public hearing to gather information that may make it unnecessary for the COE to hold a separate public hearing on the Section 404 permit application.

The FHWA and COE have developed a guidance document on joint public involvement and public hearings. The guidance appears under **How Does It Work?**

Authority and References

33 CFR 325 and 327 (COE public involvement regulations)

23 CFR 771.111(h) (FHWA public involvement regulation),

23 CFR 771.119(e), (f) and (h) and 23 CFR 771.123 (g), (h), and (i), (FHWA regulations on the timing of public notices)

Discussion

Joint Public Notice - Public notices from the SHA can be combined with the COE public notice. The following highway agency notices are usually combined and publicized together:

1. The availability of the NEPA document, and

2. The highway project public hearing.

If there is a joint public hearing, the COE hearing notice can also be combined into the joint notice (see below for further discussion of joint hearings). Joint notices may require that the project be developed with concurrent NEPA and Section 404 processes (see Chapter 11). If so, the agencies must coordinate the timing of the public hearing, release of the environmental document, and the application for the Section 404 permit. Otherwise, the SHA usually issues its combined notice of the availability of the EIS and of the public hearing long before applying for a Section 404 permit. Joint notices may eliminate at least a month of project development time because their preparation and notification periods are concurrent.

Joint Public Hearing - Joint public involvement processes and public hearings likewise are most easily arranged with concurrent processing so that all agency requirements for the timing of hearings are met. However, a COE public hearing may also be combined with a SHA public hearing on a special issue arising after the required highway project public hearing or hearings. Under this circumstance, timing may not be a complex problem. Joint hearings reduce the burden of participation on the public as well as making the participation process seem less disjointed to the public. Time savings can arise directly from the concurrent hearings and from greater resources to overcome delay. For instance, one agency may be able to prepare written transcripts or exhibits very quickly. For example, a joint public hearing on the Fort McHenry Tunnel in Baltimore was held by the COE, the Maryland Department of Transportation (MDOT), and the FHWA. A transcript of this hearing was prepared and distributed in less than 24 hours by the MDOT.

Agencies participating in a joint public hearing should plan and review the conduct of the hearing in great detail. Management officials with the authority to commit their agency to appropriate agreements should participate in the initial coordination on the hearing. In addition to the regulatory requirements, the joint public hearing must respect each agencies' perception of the project issues, desired degree of formality, and customary ways of conducting a public hearing. The last two vary widely from State-to-State and are described in the SHA's public involvement procedures. The FHWA has encouraged a flexible and informal approach to public involvement with relatively few formal requirements for the conduct of a public hearing. The COE also has few formal requirements for the conduct of a public hearing.

Attendance - Through observing highway project public hearings, the COE can gather information on whether the public interest would be served by a separate public hearing on the Section 404 permit application. Attendance does not require any rearrangement of normal project development activities. The COE has official responsibility to determine the need for a public hearing during its processing of the permit application. However, before the permit application is even made, the COE may gather information useful in making the determination.

U.S. Army Corps of Engineer/ Federal Highway Administration Guidance on Joint Early Public Involvement and Joint Public Hearings

Introduction

This U.S. Army Corps of Engineers (COE)/Federal Highway Administration (FHWA) Guidance consists of two checklists on planning and conducting joint public involvement and public hearing(s) under 23 CFR 771.111(h) and 33 CFR 327. In their Memorandum of Agreement of January 18, 1983, the Department of Transportation and the Department of the Army established the policy that "Both agencies will cooperate fully in early and continuing coordination during development of projects, environmental documentation, and public involvement processes including joint public notices and, if required, joint hearings." The checklists are not prescriptive. Rather they direct attention specifically to those areas where interagency discussion and agreement are needed for success in carrying out responsibilities for joint public involvement. The checklists are not intended as complete guides to public involvement and public hearings.

Successful preparation for and conduct of a joint public hearing or any other joint public involvement activity requires coordination and discussion among staff of the agencies. The goal is assurance that all agency public involvement requirements are satisfied, and that agency public involvement practices, often unwritten and assumed by the staff of each agency, are integrated so they do not work at cross purposes. Face-to-face interagency discussion of the detailed conduct of any joint public involvement activity is essential to compare agency requirements and, particularly, to identify divergent agency practices. Regulations cannot be compromised, and the most restrictive requirement should be followed. Agency guidelines and practices can be freely and creatively combined in the public interest.

Joint highway agency/COE public hearings are appropriate when the project meets both the public hearing criteria of the SHA and the COE criteria that the issues raised are substantial and a public hearing serves a valid purpose in making a decision on the Section 404 permit application (33 CFR 327.4). These issues include the issues and impact areas considered under NEPA as well as navigation, shoreline erosion/accretion, and recreation [33 CFR 325.3(b) and 40 CFR 230.10 (c)].

When it appears that a public hearing may be required by both agencies, it is important that the SHA, FHWA and the COE began early consideration and coordination on whether a joint public hearing is

feasible. It is recommended that agencies initially focus on the timing of the Section 404 permit application and the degree to which the FHWA/SHA and COE notice and hearing processes are to be integrated. Submission of the permit application to the COE no more than 15 days before distribution of the Notice of Availability for the environmental document allows full integration in a one-stop environmental process. This is most feasible for projects with few build alternatives and subject to the constraints of existing facilities. The interagency guidance document. "Applying the Section 404 Permit Process to Federal-aid Highway Projects," describes a process for integrating the Section 404 and environmental processes Chapter 11). It also contains a general description of joint public hearing and joint notices (Chapter 6). Alternatively, a COE public hearing may be combined with the SHA design public hearing (if one is held separately) or an optional public hearing conducted by the SHA on a special issue.

For the majority of projects in which the Section 404 permit application is submitted during project design and after the SHA location or combined hearing, COE staff may attend and observe the SHA public hearing to gather information that may make it unnecessary for the COE to hold a separate public hearing on the Section 404 permit application. During its processing of the Section 404 permit application, the COE has responsibility to determine the need for a public hearing on the permit application. However, before the permit application is even made, the COE may gather information useful in making the determination. Upon the recognition by the agencies that COE attendance at the SHA public hearing would be useful, arrangements for it can be made during interagency coordination shortly before the release of the environmental document. Optionally, the public hearing notice may mention that COE staff will be present to observe public comments in the COE areas of concern. The COE may supply a mailing list of persons and organizations known to be concerned. After the public hearing, it is recommended that the SHA provide a copy of the transcript to the COE.

I. Interagency Coordination on Early Public Involvement during Preliminary Environmental/Location Studies

_____ Identify a need for joint early public involvement on Section 404 issues:

- _____ Dissemination of information on Section 404 issues,
- _____ Gathering information on Section 404 issues,
- _____ Resolution of Section 404 issues so that a formal COE public hearing is not needed.

_____ Identify the public to be involved, including any specialized groups or individuals.

_____ Determine precisely what joint public involvement activities will satisfy the need in light of available agency resources (e.g., a survey, preliminary public notice, informal public meeting, or formal public meeting).

_____ Define the specific roles of the COE and the SHA, plan the joint activities in detail, and assign responsibilities.

_____ Arrange for the participating agencies to review the detailed plans for the joint public involvement activities.

II. Interagency Coordination on Joint Public Hearing(s) and Joint Public Notices.

_____ Determine whether any joint public involvement activities on Section 404 issues are needed as direct preparation for the joint public hearing (e.g. prehearing open house). If yes, the preceding checklist, Interagency Coordination on Early Public Involvement, may be used.

_____ Select a public hearing format acceptable to all affected agencies (e.g., traditional format, answering questions from the floor vs. taking testimony, or recess after presentation).

_____ Identify the roles of the different agency representatives at the public hearing:

  _____ Who will conduct the public hearing

  _____ Who will make presentations

_____ Establish procedures for public hearing conduct (time limits for presentations by the public, speaking order, agenda.

_____ Establish a specific interagency procedure for members of the public to register as speakers (e.g., mail or at the hearing) and for the order in which speakers appear.

_____ Define what constitutes an adequate presentation of Section 404 impacts.

_____ Establish an interagency procedure (address and deadline) for submission of written comments by the public. The COE requires a minimum of 10 days; SHA requirements vary.

_____ Select a date, place, and time for the joint public hearing.

_____ Submit the detailed public hearing agenda for review by all agencies sponsoring the joint public hearing.

_____ Arrange for a verbatim public hearing transcript. Send the COE a copy, provide copies for the SHA and FHWA in accordance SHA public involvement/public hearing procedures or other agreement, and make copies available to the public by purchase either from the COE or the hearing reporter.

_____ Determine which of the following notifications can be combined in the public hearing notice.

  _____ Notice of availability of the environmental document [see 23 CFR 771.119(e) and 23 CFR 771.123(h)].

  _____ Public Notice by the COE that an application for a Section 404 permit has been received (see 33 CFR 325.3)

  _____ The SHA public hearing notice (see 23 CFR 771.111(h)(2)(iv) and SHA public involvement/public hearing procedures).

  _____ The COE public hearing notice (33 CFR 327.11).

If the public notice combines the COE and FHWA/SHA public hearing notices with the Notice of Availability of the environmental document, the following considerations apply.

_____ Establish the text of the joint public hearing notice including interagency agreements on the conduct of the hearing, speaker registration, and submission of written comments.

_____ Arrange for the participating agencies to review the text of the joint public hearing notice.

_____ Publish the joint public hearing notice and availability of the environmental document in accordance with SHA public involvement/public hearing procedures and 23 CFR 771.119 or 23 CFR 771.123.

_____ Publish the joint public hearing in a newspaper of general circulation at least 30 days before the joint public hearing, if not so published in accordance with the SHA public involvement/public hearing procedures (33 CFR 327.11).

_____ Mail the joint public hearing notice at least 30 days before the public hearing to Federal, State, and local authorities, and to other interested persons identified by the COE.

_____ Post the joint public hearing notice in appropriate government buildings at least 30 days before the joint public hearing.

If the public notice also combines the COE Public Notice of a Section 404 permit application, the content and distribution of the notice follows the detailed directions in 33 CFR 325.3. The following considerations apply:

_____ Develop a text for the joint public notice which is responsive to all agency requirements and includes interagency agreements on the conduct of the joint public hearing, speaker registration, and submission of written comments.

_____ Arrange for participating agencies to review the text of the joint public notice.

_____ Distribute the joint public notice according to 33 CFR 325.3(c) within 15 days of receipt of the completed permit application and at least 30 days before the joint public hearing.

_____ Publish the portion of the public notice pertaining to the joint public hearing and availability of the environmental document in accordance with SHA public involvement/public hearing procedures and 23 CFR 771.119 or 771.123.

_____ Publish the joint hearing notice in a newspaper of general circulation at least 30 days before the joint public hearing if not so published in accordance with the SHA public involvement public hearing procedures (33 CFR 327.11).

CHAPTER 7

COMMUNICATION TECHNIQUES

Although frequent face-to-face meetings are the most effective means of interagency coordination, staffing and travel constraints often limit participation by Federal agencies. As a result, lead agencies find it increasingly difficult to bring all disciplines together periodically throughout the project development process. The lead agency can encourage other agencies to participate by using communication techniques to facilitate the effective use of personnel and travel resources. To improve the effectiveness of coordination, some agencies have developed new and innovative communication techniques. These techniques include audio and video conferencing, multi-project review meetings, and computer communications.

Discussion

Some of the communication techniques used by agencies to improve interagency coordination include:

- o Coordination meetings to review several projects at once.
- o Videotapes, slides, or other graphic background material on project features for participants who have not visited the project site. These visual aids should be used either prior to or at meetings.
- o Conference calls in lieu of some meetings and to supplement others.
- o Computer communications or electronic mail to expedite the transfer of information to participants. Electronic mail can be used to prepare for meetings, to rapidly followup the results of a meeting, or to communicate independently of meetings.
- o Attendance by specialists.

How Does It Work?

The following examples demonstrate ways to improve the effectiveness of coordination through communication. These examples are applicable to many areas of environmental coordination and may be particularly helpful for Section 404 permit issues.

1. **Multiproject Coordination Meetings.** Several SHAs hold periodic, multiproject coordination meetings sometimes covering as many as 30 projects per day. This approach appeals to participating agencies because their costs per project coordinated are greatly reduced. Also, periodic meetings can be predictably accommodated into travel budgets and work calendars. SHAs in Maryland, Illinois, and Virginia routinely hold such meetings.

2. **Visual Aids.** Several SHAs have begun using videotapes, slides, or slide-tape shows of highway projects and their surroundings at coordination meetings. In addition, videotapes are now being used for briefings and other project presentations. Maryland routinely uses the State police helicopter to videotape projects for presentation at quarterly interagency coordination meetings. The Virginia Highway Research Council is studying the use of video technology by highway agencies. In addition to presenting the project realistically, videotapes can be advanced or reversed slowly or frame-by-frame to locate the best view of a particular feature. Slides and slide tape shows can be used similarly but lack the versatility of video documentation.

3. **Conference Calls.** Audio conference calls involving three to five parties are easily scheduled through the local FTS operator. Conference calls involving more than five parties are scheduled through GSA's National Teleconference Service (FTS 245-3333). These calls are billed to the agency. Speaker telephones can be used to make calls which are like conference calls because more than two persons may participate. More sophisticated conference calls include enhanced audio, which supplements voice communications with still images, and video conferencing, which provides live one-way or two-way video images.

4. **Computer Communications.** Many Federal and State agencies now have microcomputers which use readily available communications software. Some software packages can link individual computers into networks which quickly transmit large volumes of detailed information either within or between agencies. Other types of electronic mail automatically transmit information to a central receiving station (mail box) which recipients check periodically. Computer communication can save time, particularly when the text being transmitted was originally typed on the microcomputer/word processor and, therefore, need not be reentered.

5. **Communication through Participating Specialists** During the early coordination stage, specialists from the State and private sectors often can provide useful scientific expertise. State and private sector scientific and engineering representation can benefit the lead Federal agencies. The concerned Federal agencies can be alerted to significant studies or findings by the participating specialists. Although such specialists cannot represent another agency in any official sense, their contributions are important. Under this type of arrangement, lead Federal agencies have been able to move ahead on the early stages of projects without the direct early involvement of all concerned agencies. At the same time, the concerned agencies can be alerted to significant projects by the participating specialists. Prior to a coordination meeting, lead and concerned agencies usually agree informally on the use of participating specialists from counterpart agencies.

CHAPTER 8

INFORMATION CENTERS

An abundance of resource information exists in various agency collections of maps, aerial photographs, resource inventories, and data bases. This section identifies examples of information centers which are useful, but not necessarily definitive in the Section 404 process. Information centers collect and present data in: (1) maps or aerial photographs and (2) computerized data bases. Agency research organizations may also have collections of useful data. In addition to data directly useful in defining specific project impacts, information centers provide background data and conclusive scientific determinations valuable for comparative impact analyses.

Maps, aerial photographs, and published information are sufficiently important as a basis for planning and decisionmaking on Federal-aid highway projects to warrant a concerted effort on the part of all agencies involved to identify and share methods of access. When agencies share both information and access to information sources early in project development, they can minimize the potential for delay and conflict. Sharing data allows agencies to focus on evaluating a proposal and the data early in project development rather than simply reacting later to each other's position. Early exchange of such information minimizes presentations of or requests for new information late in project development.

Discussion

Maps and Aerial Photographs - Recently, there have been significant advances in mapping technology. The combination of cartography, aerial photography, and computers have made available many kinds of maps at different scales and showing an array of features. Combinations of scales and features best suited to the project under consideration can be selected by computer. The National Cartographic Information Center is very useful as a general contact for maps and aerial photographs (See entry on the Center under "How Does It Work?").

Data Bases - Enough pertinent publications are generated each year to make it advantageous for specialists to organize them into data bases for rapid, comprehensive screening by a large and growing number of users. Compiled by agencies or commercial enterprises, data bases can contain data such as sample observations of water quality. Other data bases contain literature references including key words for a search, the title, an abstract, and a source for obtaining a copy of the document. Users can access a data base either directly through the sponsor or through a technical librarian. Agency libraries can help identify useful data bases and, in some cases, access them. Individuals in other agencies are also good sources of information on available data bases.

Research Organizations - Many agencies have research facilities whose staff may have collections of data useful for planning and decisionmaking. Research organizations should be investigated through agency contacts familiar with a subject area.

Journals and Periodicals - Many technical publications are available which may provide information valuable in project-specific situations. Two useful sources are: 1) Wetlands, the journal of the Society of Wetland Scientists and 2) the Community Profiles published by the National Wetlands Research Center of the FWS.

How Does It Work?

This listing of information centers is divided into maps (including aerial photographs) and data bases. This list is not all-inclusive; there may be other sources valuable for specific projects. Each listing briefly describes the information source, the type of information collected, and an address or telephone number.

Maps and Aerial Photographs -

1. **U.S. Geological Survey (USGS) National Cartographic Information Center** can inform users about its own many cartographic products and those of the following Federal agencies:

   U.S. Forest Service, Bureau of Land Management, Water and Power Resources Service, Bureau of the Census, FWS, Central Intelligence Agency, National Oceanic and Atmospheric Administration, National Ocean Survey, COE, FHWA, Federal Energy Regulatory Commission, Tennessee Valley Authority, Mississippi River Commission, International Boundary Commission, Library of Congress, Agricultural Stabilization and Conservation Service, Soil Conservation Service, National Archives and Records Service, National Aeronautics and Space Administration, and the Defense Mapping Agency.

   Information on map availability and purchase can be obtained at: National Cartographic Information Center Headquarters, Reston, Virginia, 703-860-6045, FTS 928-6045. There are also regional centers:

   Eastern Mapping Center, Reston, Virginia, 703-860-6336, FTS 928-6336;
   Mid-Continent Mapping Center, Rolla, Missouri, 314-341-0851, FTS 277-0851;
   National Cartographic Information Center, NSTL Station, Mississippi 601-688-3544, FTS 494-3544;
   Rocky Mountain Mapping Center, Denver, Colorado, 303-234-2326;
   Western Mapping Center, Menlo Park, California, 415-323-8111 ext. 2427, FTS 467-2427;

National Cartographic Information Center Anchorage, Alaska, 907-271-4159, FTS 271-4159; and
Tennessee Valley Authority, Chattanooga, Tennessee, 615-755-2148, FTS 857-2148.

A USGS publication: U. S. Geological Survey Circular 900, Guide to Obtaining USGS Information is available from the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225 303-236-7476.

2. **The SHAs** often have maps on file for Federal-aid highway projects. In addition, the SHAs may prepare aerial photographs and surveys of some projects. The FHWA division offices, found in most State capitals, should be contacted for assistance in locating available SHA maps and photographs.

3. **The FWS National Wetlands Inventory** has produced over 10,000 detailed maps showing the location, shape, and characteristics of wetlands and deepwater habitats on U.S. Geological Survey 7.5 minute base maps. The maps cover 45 percent of the lower 48 States, 12 percent of Alaska, and all of Hawaii and Puerto Rico. The mapped area includes roughly 95 percent of the coastal zone of the lower 48 States and the Great Lakes region. Mapping is complete for 9 States and is underway in portions of 40 other States. The goal is to produce maps for an additional 5.5 percent of the lower 48 States and 2 percent of Alaska each year. Some small scale maps for watershed and regional planning are available for limited areas. For information about purchasing maps, contact U. S. Fish and Wildlife Service, National Wetland Inventory, 9720 Executive Center Drive, Suite 101, St. Petersburg, Florida 33702, or call 1-800-USA-MAPS.

4. **The Soil Conservation Service SCS** conducts soil surveys and produces maps depicting the locations and extent of soil types. Mapping is available for most areas of the country. The Service updates the mapping periodically as new survey information becomes available. Information about soil surveys and maps can be obtained from the SCS county offices throughout the country.

Data Bases -

1. **DIALOG Information Services, Inc.,** a commercial data base, contains primary sources from around the world including books, conference papers, periodicals, research papers, and technical reports. Its public files are available to any customer for a fee. There are also private files that can be accessed only by customers authorized to use them. Most agency libraries with computer capabilities can provide information about using DIALOG. Information may be obtained from DIALOG Information Services, Inc., 3460 Hillview Avenue, Palo Alto, California 94304.

2. **The Highway Research Information System** (HRIS) is an information storage and retrieval system developed cooperatively by the

Transportation Research Board , SHAs, and the FHWA. The HRIS provides abstracts of published works and summaries of highway-related research in progress. Information on HRIS is available through most agencies' libraries or by contacting: HRIS Manager, Transportation Research Board, 2101 Constitution Avenue NW., Washington, D.C. 20418, (202) 334-3250.

3. **Fish and Wildlife Reference Service** operated by Informatics General Corporation under contract to the FWS, Division of Federal Aid, is an information retrieval system and repository that provides State research information to biologists, management personnel, and other interested persons. It stores and retrieves documents produced under Federal-Aid in Fish and Wildlife Restoration Program (Pittman-Robertson and Dingell-Johnson Acts) funding. It also indexes and accesses reports from the Anadramous Fish Conservation Program, Endangered Species Grants Program, and Cooperative Fishery and Wildlife Research Units. Information about both completed reports and research in progress is available from this source. Information may be obtained from Fish and Wildlife Reference Service, 6011 Executive Blvd., Rockville, Maryland 20852, 800-582-3421 (301-770-3000 in Maryland).

4. The **FWS Wetland Value Data Base** is a computerized, annotated bibliography of scientific literature concerning the functions and values of wetlands. The data base was created by the National Wetland Inventory (NWI), and is maintained and updated by the FWS National Ecology Center, located at Fort Collins, Colorado. The geographically referenced data base contains 5,000 articles; and 1,000 new articles are added annually. For information, contact: Data Base Administrator, U.S. Fish and Wildlife Service, National Energy Center, 2627 Redwing Road, Creekside One, Fort Collins, Colorado 80526, 303-226-9411, FTS 323-5411.

5. The **FWS National Wetland Plant Species Data Base** is a computerized data base created by the NWI. The information on each recorded species is subdivided into 38 categories to aid in computer retrieval and analysis. The wetland plant species data base contains the following information:

    - o species taxonomy
    - o wetland specificity of indicator status
    - o common names
    - o distribution by State, region (as defined in the Soil Conservation Service's National List of Scientific Plant Names), and zone
    - o description of the habitats in which the plant occurs
    - o wetland communities and/or forest types in which the species occurs
    - o classification of the wetland communities according to Cowardin et al. (1979)
    - o flowering time of the species
    - o range of elevations in which the species occurs

Of an estimated 5,200 species of plants believed to occur in wetlands in the United States, approximately 4,000 plant species are presently in the data base. For information, contact: U.S. Fish and Wildlife Service, Wetland Inventory Center, 9720 Executive Center Drive, Suite 101, St. Petersburg, Florida 33702, 813-893-3867, FTS 826-3867.

6. **U.S. Department of Agriculture, Soil Conservation Service List of Hydric Soils of the United States.** can be used for wetland delineations when combined with vegetation and hydrological information. Listed soils include (1) all histosols except folists, (2) soils in aquic suborders, (3) soils that are ponded during the growing season, and (4) soils that are frequently flooded for long duration or for very long duration during growing seasons. For information, contact: Chairman of Technical Committees for Hydric Soils, U. S. Department of Agriculture, Post Office Box 2890, Washington, D.C. 20013.

7. **Environmental Technical Information System (ETIS)** in the Department of Urban and Regional Planning at the University of Illinois, Champaign-Urbana, Illinois 61801 was developed by the U. S. Army Corps of Engineers Construction Engineering Research Laboratory. It has four primary subsystems. The most useful in the Section 404 process is Soils Systems, which can be used to access soil information such as soil descriptions, soil properties, use interpretations, suitability tables, and soil series names. The other three subsystems are: (1) Environmental Impact Computer System relating the project to a listing of probable impact areas; (2) Economic Impact Forecast System containing socio-economic statistics for every county; and (3) Computer-aided Environmental Legislative Data System accessing abstracts of environmental statutes and regulations. Access is by subscription, and training workshops are offered. The ETIS Program Office telephone number is 217-333-1369.

8. **National Technical Information Service (NTIS),** operated by the Department of Commerce, sells reprints of technical information submitted by Federal agencies. All material available from NTIS is abstracted and entered in the DIALOG computer system for ready reference. The policies of various Federal agencies differ with respect to entering publications in the NTIS system. For instance, the EPA, Office of Research and Development puts all of its research reports in NTIS, but the EPA regional laboratories and program offices put only some of their reports in NTIS, and therefore in DIALOG. Information may be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, 703-487-4600.

9. **STORET** is a computerized water quality data base operated by the EPA. It contains station data which describe and categorize the geographical location where a sample has been taken, and parametric data which describe the conditions under which the sample was taken as well as the result of the sample analysis. A total of 46 State agencies, and many Federal agencies including the USGS, Forest Service, COE, Bureau of Land Management, Tennessee Valley Authority, FWS, and the National Park Service contribute data to the system and access it

directly. The EPA, Office of Water conducts seminars and training sessions to teach prospective users how to access the system, but does not usually access the system itself for clients. Information may be obtained from the Environmental Protection Agency, STORET (WH-553), 401 M Street, SW., Washington, D.C. 20460, 202-426-7792, FTS 426-7792.

10. **CEQ System Data Base** is devoted exclusively to Environmental Impact Statements and is managed by the EPA, Office of Federal Activities. Access is made only by the Management Information Unit in the Office of Federal Activities. Information may be obtained from EPA, Office of Federal Activities (A-104), Washington, D.C. 20460, 202-382-5074, FTS 382-5074.

11. **Computerized Fish and Wildlife Information Systems** are operated by several States. These computerized data retrieval systems feature wildlife species distribution, habitat characteristics, life cycle requirements and management information. The State programs are coordinated under the Multi-State Fish and Wildlife Information Systems project of the Eastern States Office, Bureau of Land Management, which may be contacted at 350 S. Pickett Street, Alexandria, Virginia 22304 703-235-9643.

CHAPTER 9

RESOURCE IDENTIFICATION, EVALUATION, AND MITIGATION

Highway projects can be constructed in a timely manner with minimal controversy and conflict when proper resource identification, evaluation, and mitigation planning techniques are incorporated into the project planning and development process. State and Federal highway personnel are challenged to develop and coordinate resource information with sufficient specificity and accuracy to anticipate, avoid and resolve resource conflicts. Proper resource planning becomes crucial when NEPA documents and Federal permit applications are developed and evaluated.

Additionally, the requirements of both Executive Orders 11998 (Floodplain Management) and 11990 (Protection of Wetlands) must be incorporated into agency planning and environmental actions. Projects located in either wetlands or floodplains require that agency decisions on alternatives selection and mitigation be documented and justified. Wetlands provide a myriad of functions such as providing fish and wildlife habitat, retaining stormwater, attenuating and/or assimilating nutrients and pollutants, and preventing or retarding erosion. In addition, the various Federal and State resource agencies have statutory concerns with regard to wetlands (i.e., FWS is concerned with habitat support values of wetlands for migratory birds.

The planning and environmental phases of highway development culminate in a specific project proposal or intended action. Adequate input by resource agencies during these phases can result in mitigation recommendations designed to avoid, ameliorate and compensate impacts to important resource values. Incorporating best management practices, standard conditions, and other impact minimization measures can facilitate project permitting and implementation. Timely and accurate inputs by all agencies can help avoid controversy.

Authority and References

33 CFR 320.4, U.S. Corps of Engineers, "General Policies for Evaluating Permit Applications". Federal Register 51, No. 219, Thursday, November 13, 1986, Rules and Regulations.

40 CFR 1502.14 (alternatives), 40 CFR 1502.16 (environmental consequences), 40 CFR 1508.20 (definition of mitigation, Council on Environmental Quality "Regulations for Implementing The Procedural Provision of the National Environmental Policy Act,"

Adamus, P. 1983. A Method for Wetland Functional Assessment, U.S. Department of Transportation. Vol. I and II, Report No. FHWA-IP-82-23 and FHWA IP-82-24. Federal Highway Administration, Washington, D.C.

Adamus, P.R., E.J. Clairain, Jr., D.R. Smith, and R.E. Young. 1987. Wetland Evaluation Technique (WET), Volume II, Operational Draft. Prepared for the COE and the FHWA, Washington, D.C. 206 pp. and appendices.

Cowardin, L.M., Carter, V. Golet, C.F. and LaRoe, E.T. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31, Washington, D.C. 103pp.

U.S. Fish and Wildlife Service. 1981. U.S. Fish and Wildlife Service Mitigation Policy. USDI, Federal Register, Vol 46, No. 15, Washington, D.C.

Federal Highway Administration
23 CFR 771, "Environmental Impact and Related Procedures"
23 CFR 777, "Mitigation of Impacts to Privately Owned Wetlands"

40 CFR Part 230, Guidelines for Specification of Disposal Sites for Dredged or Fill Material [Section 404(b)(1)], Environmental Protection Agency.

40 CFR Part 231, Denial or Restriction of Disposal Site [Section 404(c)], Environmental Protection Agency.

Fish and Wildlife Coordination Act [16 U.S.C. 661-667(e)]

U.S. Fish and Wildlife Service. Instructional Memorandum No. 60. September 16, 1982, on "Federal Highway Administration and Mitigation." Washington, D.C.

Executive Order 11988, Floodplain Management, May 24, 1977.

Executive Order 11990, Protection of Wetlands, May 24, 1977.

Discussion

A multidisciplinary approach during project planning and development can eliminate surprises and conflicts during application or review stages. The Department of Army Regulations (33 CFR 320.4) lists the major factors considered during permit reviews: conservation, economics, esthetics, general environmental concerns, wetlands, cultural values, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, property ownership, and general needs and welfare of the people. The review includes procedures to assure compliance with the provisions of the Section 404(b)(1) guidelines (40 CFR 230). Thus, almost any resource value can become a focus of the Section 404 permit process.

Timing and specificity of information should be carefully matched to the appropriate planning stage and type of permit (Nationwide, Individual, etc.) being sought for a highway project. It is important to have as much

information as possible during the evaluation and permitting stages. In this regard, the earlier the information is collected and used during project development the better resource agencies and highway agencies can work together.

When appropriate, some resource identification, evaluation and mitigation planning steps can be accomplished for the highway agency by consulting firms. Predevelopment and preapplication consultation with resource agencies at the State and Federal levels is important. An evaluation of the projects and proposed mitigation will be made by the resource agencies during the NEPA process and during permit application review. Highway personnel should ensure that consultants and resource agencies closely coordinate with each other to ensure potential conflicts are resolved early.

How Does It Work?

Resource Identification. The SHA should work cooperatively with the Federal resource agencies, State fish and wildlife agencies as well as with the COE and the FHWA during the NEPA review process and when Federal permits (e.g., Section 404) are required. Contact with these agencies is necessary to accurately identify resources that occur in project areas which could potentially be impacted by highway project development. Although the contact may identify a wide variety of resources, Section 404 coordination will focus on aquatic habitat issues. Under most circumstances, the COE will identify the areas subject to 404 permitting. However, the EPA will make the jurisdictional call in certain special cases. The agency responsibilities and a list of special case areas were published in the Federal Register (45 FR 129, 45018-45020).

Chapters 6, 7, and 10 discuss techniques and examples of agency interaction which can result in resource identification. For example, initial baseline data should be collected on fish and wildlife resources and their supporting habitats. The baseline data should contain information on both terrestrial and aquatic resources, including wetland functions. Additionally, data on public use of these resources should be collected when consideration of socio-economic values is necessary for making resource evaluations.

In order to conduct adequate evaluation and mitigation planning, existing data (from State or Federal fish and wildlife agencies) and additional data obtained from field sampling may be needed to accurately characterize fish and wildlife resources. Vegetational community structure should be identified by "cover types;" maps depicting vegetation may be available for a given project area. The FWS Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979) and National Wetlands Inventory map overlays (if available for the project area) may provide information regarding classification and delineation of wetlands. However, the maps do not necessarily portray Section 404 regulatory jurisdiction for wetlands. Regulatory jurisdiction is determined using definitions and delineation methodologies by the COE and EPA in cooperation with State and Federal resource agencies. If requested, the COE will identify, or assist others in identifying, waterways and wetlands within the jurisdiction of Section 404 regulatory authorities.

An important consideration for any resource identification process is that accurate information be developed using currently acceptable state-of-the-art inventory techniques. As a practical matter, periodic updating or field monitoring may be needed during the project planning and development process to ensure natural conditions have not changed, especially during lengthy planning frequently encountered for highway projects. Additional and recurring coordination between lead and resource agencies is needed to ensure current concerns are included and project sponsors use the best available biological data. Followup by the resource agencies may also ensure that new issues are taken into account or that the SHA is kept advised of changing biological conditions.

Resource Evaluation. The assessments of highway project impacts requires agency cooperation. Lead and resource agency staff are encouraged to conduct a coordinated assessment of resource values and then make estimates of project impacts. Sometimes this evaluation is relatively straight forward, however, when important or potentially controversial resources are involved, it can be more complicated. Several methodologies have been developed to evaluate biological resource values and project impacts. These include but are not limited to:

- Habitat Evaluation Procedures (HEP) developed by the FWS.
- Instream Flow Incremental Methodology (IFIM) developed by the FWS.
- Habitat evaluation system (HES) developed by the COE.
- The method for wetland functional assessment developed by the FHWA (Adamus, 1983).
- Wetland Evaluation Technique (WET) developed by the COE and the FHWA (Adamus et al. 1987).
- State fish and wildlife evaluation procedures, many States have developed procedures that complement, modify, or replace Federal evaluation techniques.

Generally, these methods provide procedures for relative habitat value assessments. Where appropriate, HEP may be used to evaluate the impacts of proposed project on fish and wildlife resources. The HEP methodology quantifies the relative value of habitats to fish and wildlife resources with a quality/quantity unit value of measurement (i.e., habitat units).

Other procedures, "A Method for Wetland Functional Assessment" and "Wetland Evaluation Technique" Adamus, 1983 and 1987), provide a rapid assessment procedures for screening functional values of wetlands. These assessment methods are qualitative but are based on extensive scientific literature concerning wetlands functions. The methods incorporate most recognized values of wetlands, including social factors.

The type of evaluation system to be employed and responsibilities of participants should be coordinated closely between the lead and resource agencies. Generally, Federal and State resource agencies are equipped to conduct technical resource evaluations. Agreements regarding evaluation techniques should be reached during early planning to be sure that the specific values of potential highway impacted wetlands and Federal and State concerns are identified. This will reduce conflicts during the NEPA process and permitting stage of project development.

Evaluations of monetary values of biological resources for commercial and sport fishing, hunting and trapping can be obtained by using various approaches. Base data is often available through State or Federal wildlife and fisheries agencies. The FWS's Human Use and Economic Evaluation (HUEE) procedures can be used to document monetary values. Other guidelines are available from the Water Resources Council's Standards and Guidelines for Water and Related Land Resources Project Implementation Studies, March 10, 1983.

Both action and resource agencies continue to fund research to develop and refine techniques for habitat assessment and evaluation. Agencies sponsoring this type of research and development should appropriately communicate and coordinate with other interested agencies.

Resource Mitigation. Mitigation is defined in the Council on Environmental Quality (CEQ) "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act" (40 CFR 1508.20). These regulations describe five elements which may be considered to develop justifiable measures to mitigate losses. Under CEQ's regulations, "mitigation" includes:

1. Avoiding the impact altogether by not taking a certain action or parts of an action.

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

5. Compensating for the impact by replacing or providing substitute resources or environments.

Agencies generally consider the five elements of mitigation as hierarchial beginning with avoidance. The emphasis placed on each element, or combination of elements, often varies according to individual agency mitigation policies.

There is currently an interagency working group formed to develop guidance on implementing mitigation requirements for permit actions under the Section 404(b)(1) guidelines. The working group includes the COE and EPA. The FWS and NMFS have an advisory role.

The remainder of this Chapter addresses the present policies of Federal agencies involved in Section 404 permitting on Federal-aid highway projects. The intention is to demonstrate the differences in the approach to and application of mitigation principles. Recognition and understanding of these differences should be the initial step when agencies coordinate to develop a mitigation plan for any proposed project.

U.S. Fish and Wildlife Service - The FWS's mitigation policy (Federal Register Vol. 46, No. 15) can be used to identify fish and wildlife resource category areas based upon the area's value to the maintenance of important species and the relative scarcity/abundance of each habitat. A resource category is designated by: (1) identifying habitats; (2) identifying important evaluation species for each habitat; and (3) assigning a resource category. The policy's concept is that the recommended degree of mitigation should correspond to the importance and scarcity of the habitat at risk. Each category has a mitigation goal so that the level of mitigation recommended will be consistent with the resource values involved. Category determinations and mitigation goals should be closely coordinated with other resource agencies as well as the highway project sponsors. The resource categories are defined as follows:

RESOURCE CATEGORY 1

A. Designation Criteria--Habitat to be impacted is of high value for evaluation species and is unique and irreplaceable on a national basis or in the ecoregion section.

B. Mitigation Goal--No Loss of Existing Habitat Value.

RESOURCE CATEGORY 2

A. Designation Criteria--Habitat to be impacted is of high value for evaluation species and is relatively scarce or becoming scarce on a national basis or in the ecoregion section.

B. Mitigation Goal--No Net Loss of In-Kind Habitat Value.

RESOURCE CATEGORY 3

A. Designation Criteria--Habitat to be impacted is of high to medium value for evaluation species and is relatively abundant on a national basis.

B. Mitigation Goal--No Net Loss of Habitat Value While Minimizing Loss of In-Kind Habitat Value.

RESOURCE CATEGORY 4

A. Designation Criteria--Habitat to be impacted is of medium to low value for evaluation species.

B. Mitigation Goal--Minimize Loss of Habitat Value.

Federal Highway Administration - According to FHWA policy, measures necessary to mitigate adverse impacts will be incorporated into proposed actions [23 CFR 771.105(d)]. To be eligible for Federal-aid funding, measures must mitigate impacts actually resulting from the highway project and be a reasonable public expenditure in light of the severity of the impact and benefits derived from the mitigation.

Relating directly to Section 404, the FHWA has an additional regulation (23 CFR 777) which provides policy and procedures for mitigating impacts to privately owned wetlands. This regulation allows Federal-aid funding for measures to mitigate adverse environmental impacts to privately owned wetlands affected by an FHWA action. The following "evaluation of impacts" is presented in the FHWA policy regarding mitigation:

1. The extent of Federal-aid participation in measures to mitigate adverse highway impacts to privately owned wetlands should be directly related to:

    a. The importance of the impacted wetlands, and

    b. The highway impact on the wetlands.

2. Evaluation of the importance of the impacted wetlands should consider:

    a. The primary functions of the wetland (e.g., flood control, wildlife habitat, erosion control, etc.),

    b. The relative importance of these functions to the total wetland resources of the area, and

    c. Other factors such as uniqueness, esthetics, etc.

3. A determination of the highway impact should focus on how the project affects the stability and quality of the wetlands. This evaluation should consider the short and long-term effects on the wetlands and the importance of any loss such as:

    a. Flood control capacity,

    b. Erosion control potential,

    c. Water pollution abatement capacity, and

    d. Wildlife habitat value.

Under Executive Order 11990 and 23 CFR 777 first consideration must be given to avoiding wetland impacts. If avoidance is not practicable, the FHWA wetland mitigation policy directs that consideration must be given to measures within the projectright-of-way limits.

If such measures do not adequately mitigate wetland impacts, the regulation allows the use of Federal-aid funds to improve existing wetlands or purchase replacement areas beyond the right-of-way. The FHWA may participate in the cost of replacement wetlands purchased up to a maximum extent of 1 acre for each acre directly affected by the project.

Environmental Protection Agency - The Section 404(b)(1) Guidelines and EPA's mitigation policy require that impacts be avoided to the extent possible by selecting the least environmentally damaging, practicable alternative. If it is determined that no alternative site exists for the proposed activity, on-site minimization should be utilized to the fullest extent practicable to lessen the degree of impact to a wetland or other aquatic ecosystem. As ecological balances are complex and difficult to duplicate with certainty, techniques should attempt to protect existing resources. Practicable on-site minimization techniques are required to ensure compliance with the 404(b)(1) Guidelines, and are to be supplemented with other mitigation techniques as appropriate. In situations where on-site minimization is not sufficient to adequately offset unavoidable adverse impacts, compensation techniques may be considered. Compensation actions, such as creation of artificial wetlands, are acceptable for unavoidable impacts only. Due to the scientific uncertainty of such compensatory techniques, they should be undertaken, when practicable, in those areas adjacent or contiguous to the discharge site to assure the greatest degree of success. In addition, attention should be given to assurances whereby these "created" or "enhanced" wetlands are maintained subsequent to their creation or enhancement. The acreage should remain as a wetland system with the threat of future degradation from man's activities being permanently removed. Specific mitigation policies of EPA Regional offices may be more detailed and are applied to all projects within the Region.

U.S. Corps of Engineers - The COE general mitigation policy is an important aspect of the evaluation process on Section 404 permit applications. Consideration of mitigation occurs during the application evaluation process and includes avoiding, minimizing, rectifying, reducing or compensating for resource losses. Losses are avoided to the extent practicable and compensation may occur on-site or at an off-site location. Mitigation requirements generally fall into three categories:

1. Project modification to minimize adverse project impacts. Such modification can include reductions in scope size; changes in construction methods, materials or timing; and operation and maintenance practices or similar modification that reflects a sensitivity to environmental quality within the context of the work proposed.

2. Further mitigation measures required to meet legal requirements.

3. Mitigation measures, in addition to those described above, required as a result of the public interest review process.

All compensatory mitigation will be for resource losses which are specifically identifiable, reasonably likely to occur, and important to the human or aquatic environment. Also, all mitigation will be directly related to the impacts of the proposal, appropriate to the scope and degree of those impacts, and reasonably enforceable. Additional mitigation may be added at the applicants' request.

Each of the above Federal agencies will adhere to their specific mitigation policies when involved in the permit process. When commenting on any permit-related mitigation plan, each agency will recommend specific measures and a level of effort consistent with their policies. Although the applicant may find it appropriate to incorporate the elements of each agencies' recommendation into the final mitigation plan, mitigation required to satisfy the COE permitting requirements will be determined by the District Engineer. In addition, the FHWA decides independently which mitigation measures are eligible for Federal-aid highway funding.

CHAPTER 10

COOPERATIVE AGREEMENTS FOR TECHNICAL ASSISTANCE

Through cooperative agreements, Federal or State resource agencies can provide technical assistance during the planning and development of Federal-aid highway projects. Unlike the interagency procedural agreements discussed in Chapter 4, cooperative agreements for technical assistance apply to specific projects. Interagency technical assistance can be used for attaining essential information on baseline conditions, impacts of alternatives, possible mitigation measures, and net impacts after mitigation. For example, FWS field offices conduct biological studies for the COE. State and local highway agencies may wish to consider similar arrangements with resource agencies.

Cooperative agreements for technical assistance can enable resource agencies to participate early in the planning and development of highway projects instead of reacting to Section 404 permit applications. Thus, these agreements can improve the overall "climate" of coordination and make it more effective. Resource agencies like the FWS, the NMFS or a State department of natural resources can often perform analyses or provide technical information directly to a SHA. This direct involvement by resource agencies may lead to more acceptable environmental documents and Section 404 applications.

Authority and References

31 U.S.C. 1535 - Economy Act

Intergovernmental Cooperation Act of 1968

40 CFR 1501.6 - Council on Environmental Quality's Regulations for Implementing the National Environmental Policy Act (NEPA)

Discussion

Cooperative agreements for technical assistance can range from interagency letters requesting specific data to formal, reimbursable agreements for complete analyses. Cooperative agreements can be used at any time information is needed but are most effective during the impact analysis stage of the NEPA process. In the context of the NEPA process, cooperative agreements can serve to identify tasks which cooperating agencies perform for the lead agencies. Additionally, cooperative agreements can identify information gathering activities performed by other agencies as part of the technical analyses conducted by the lead agency. Early, substantive involvement of resource agencies can surface Section 404 issues at a time when they are most easily resolved.

How Does It Work?

The following three issues are relevant to implementing cooperative agreements between Federal and State resource agencies and SHA's: (1) legal authorities to facilitate interagency cooperation, (2) timing of technical assistance, and (3) format for cooperative agreements.

First, many Federal agencies have statutory responsibilities for reviewing Federal-aid highway projects. These statutes frequently provide authority to cooperate with other agencies in a more substantive role. Also, statutory authority often exists within the enabling legislation of Federal agencies to conduct work that is within the mission of that agency. In particular, Section 1501.6 of Council on Environmental Quality's NEPA Regulations describes the responsibilities of the lead and cooperating agencies for technical assistance. It specifically addresses the opportunity for a lead agency, including SHAs acting in a joint lead capacity, to fund a cooperating agency for providing technical assistance.

Cooperative agreements for technical assistance can also be made between a Federal agency and a non-Federal entity under the Intergovernmental Cooperation Act of 1968 (P.L. 90-577). This act allows any Federal agency to provide specialized or technical services on a reimbursable basis to any State agency or instrumentality, including political subdivisions or local governments. This process includes the stipulations that (1) the governmental entity submit a written request and (2) the written request including a statement to the effect that such services cannot be procured reasonably and expeditiously through ordinary business channels.

Congress has also provided general statutory authority for any Federal agency to receive reimbursement to its appropriations from another Federal agency or from a non-Federal entity for specific purposes. Reimbursements can be made for furnishing materials or performing work/services. For example, the Economy Act, (31 U.S.C. 1535), is applicable to all Federal agencies, and covers reimbursements from non-Federal entities. NEPA [40 CFR 1501.6(a)(5)] also indicates the possibility of lead agency funding of analyses conducted by cooperating agencies.

The SHAs and the FHWA should explore funding authorities whenever the State seeks the services of a Federal agency. Generally, such assignments for services would be reimbursable under the Federal-aid highway program as preliminary engineering costs.

The second issue is timing of technical assistance. Because of the relationship between the NEPA decisionmaking document and the Section 404 permit application, technical assistance specifically to address Section 404 concerns should be requested and rendered before completion of the NEPA process.

The final issue is the format of an agreement for technical assistance. Such agreements would generally be between the field or district offices of Federal agencies, and SHAs or State resource agencies. The following example provides suggested format and content of a cooperative agreement for technical assistance. Format and content of such agreements may vary depending on the situation.

SAMPLE COOPERATIVE AGREEMENT FOR TECHNICAL ASSISTANCE

I. Purpose

The purpose of the agreement should be stated, including the name of the agencies involved. If the agreement is to improve cooperation, efficiency, and effectiveness, it should be so stated. The name, location, and purposes of the proposed project should also be briefly described.

II. Authority

List the authorization for the proposed project. List the authority(ies) for conducting investigations under the cooperative agreement, including any funding authorizations if the cost of the activities is to be reimbursed.

III. Definitions

List any definitions of terms or acronyms pertinent to the agreement.

IV. Background

Provide a concise statement of the geographic area, project purposes to be addressed and any other boundaries, general or specific, pertinent in the agreement. Provide any additional general background to help clarify the role of the parties in the agreement, the expected products (including the extent and complexity of investigations), and where the data and information generated under the agreement will be used.

V. Responsibilities of the Resource Agency

This section should indicate what specific investigations the resource agency will conduct, including the level of field work, analysis, and literature review, as appropriate. The expected timeframes for completing products/deliverables should be determined, including interim schedules and products. The expected format and content of the products must be clearly understood by both parties.

Identify a contact person, including the address and telephone number.

VI. Responsibilities of the State Highway Agency

Identify data to be provided by the State highway agency (SHA) as appropriate to the resource agency necessary to conduct the investigations. The schedule for the delivery of these products should be determined.

The following is a list of some of the data and/or information that may be requested from the SHA as appropriate.

- up-to-date project plans;
- project maps, topographic maps, aerial photographs;
- hydrological data;
- predicted land-use changes for the project area;
- description of current land status within study area.

If desired, appropriate items from the above list may be specifically listed in the agreement. If information is not available at the time of negotiations, its need can still be formally recognized in the agreement, and a date of delivery of the information indicated.

Identify a contact person, including the address and telephone number.

VII. Modification of the Agreement

A change in the nature of the project by the SHA as a result of preliminary studies may lead to a substantial change in the nature of resource agency investigations under an agreement. In that event, either party may initiate renegotiation of the agreement.

VIII. Reimbursement for Services

The agreement should clearly state where and when reimbursement payments are due.

IX. Termination of the Agreement

A clause may be inserted indicating that either party may terminate the agreement by notice in writing in advance of a specified termination date.

X. Approval

The agreement should be signed and dated by a representative of each party in the agreement. The signatures would normally be at the lowest supervisory level closest to the actual work being done (investigations/planning).

INTEGRATING NEPA AND SECTION 404

CHAPTER 11

PERMIT CONSIDERATIONS DURING THE NEPA PROCESS

Typically, SHAs apply for Section 404 permits for major highway proposals after the NEPA document has been approved, and the project is in final design. There are benefits, however, to both the SHA and the COE in developing the permit application earlier in the process. Benefits such as time savings and reduced controversy may outweigh the extra effort required to address Section 404 considerations as an integral part of the NEPA process. When the two processes are integrated effectively, approval of the permit could be concurrent with FHWA's final NEPA action. The COE could adopt the final document when making the permit decision. This action would result in no additional NEPA documentation being required.

Authority and References

23 CFR 771.113 Timing of administrative actions (FHWA)

33 CFR 320 General Regulatory Policies (COE)

40 CFR 230.80 Advanced Identification of Disposal Sites (EPA)

"Regulatory Program: Applicant Information," pamphlet EP 1145-2-1, May 1985, U.S. Army Corps of Engineers

Discussion

If actions under Section 404 and NEPA are to proceed concurrently, existing links between the two processes should be examined and utilized more extensively, if appropriate. Specifically, highway project sponsors should utilize these links to the maximum extent appropriate during the overall highway development process. Beginning on page 11-9, the typical highway development process (as presented in the introduction to this document) is displayed with the possible corresponding steps of the Section 404 permitting process.

There are obvious links between the NEPA process and general permits under Section 404. Integrating NEPA and individual Section 404 permits poses an additional challenge because few obvious links are apparent.

General Permits - Nationwide and other general permits are commonly applicable to highway projects having minor impacts associated with the placement of fill material. Although the majority of these projects are processed under NEPA either as Categorical Exclusions(CEs) or with Environmental Assessments/Findings Of No Significant Impact (EA/FONSI), general permits are not necessarily applicable to all projects of this type. Applicability of a general permit depends on the impacts of the fill activity and not on the level of NEPA documentation required to address all project impacts. However, for

projects processed as CEs there is a specific nationwide permit at 33 CFR 330.5(a)(23) if the activity meets all the conditions and appropriate notification requirements of the permit. Thus, the NEPA considerations for projects of this type have an existing, direct link with Section 404.

Projects properly classified as CEs and having fill activities consistent with the use of nationwide permits are not subject to additional processing relative to Section 404. However, the COE may invoke its discretionary authority to require site-specific conditions or processing with an individual permit.

Highway projects having significant impacts and processed with an EIS can also use a nationwide or general permit, if the conditions of the permit are met. These projects generally will have minor impacts associated with the placement of fill material. It is the significant impacts on resources unrelated to the fill that will warrant the preparation of an EIS.

In all cases, the decision to use a nationwide or general permit must be supported by an examination that ensures the project is properly classified and all the conditions associated with the permit are satisfied. This should be routinely accomplished during early project development with in-house examinations, interagency coordination, the advanced identification process found in Part 230.80 of the Section 404(b)(1) Guidelines, and public involvement as necessary. By the time the project is either categorically excluded or finalized with a FONSI or Record of Decision and sufficient design is available, general permit applicability and any required conditions should be clear to the project sponsors, other interested agencies and the public. If changes are made to a project proposal any time after these approval actions, an applicant must reassess the applicability of the nationwide or general permit.

Individual Permits - Federal-aid highway projects that require individual Section 404 permits have impacts associated with the discharge of dredged or fill material that may play a substantial role in the assessment and selection of location alternatives, design features, and construction techniques. In these situations, the viability of an alternative may depend on whether the SHA believes there is a good possibility that a permit can be obtained. The SHA would draw the conclusion only after considering the alternative in light of input by the COE and resource agencies.

When Section 404 issues play a substantial role in the consideration of project alternatives, the SHA may benefit from any action that leads to an early indication by the COE of whether a permit is likely to be issued. One possibility would be for the COE to provide the SHA with a ranking of alternatives based on the anticipated level of impacts. If a permit is not likely to be issued for a proposed alternative, the SHA and FHWA could eliminate the alignment from further

consideration, modify the project plans to alleviate the concern, or propose alternate mitigation features. Conversely, if a permit is likely to be issued, the SHA and the FHWA can proceed to develop mitigation measures as appropriate and practicable in cooperation with the resource agencies.

The FHWA and a SHA could determine the likelihood of obtaining a permit through the early and continued coordination necessary for preparing an environmental document under NEPA. However, the early coordination must focus on Section 404 issues, as well as the other elements of a normal NEPA review. Furthermore, all participating agencies must be willing to provide input at these early stages of project development if the likelihood of permit is to be determined by the conclusion of the NEPA activity. The SHA should maximize opportunities for early coordination specifically tailored to produce the information necessary for a permit application. This information could then be used to prepare and submit the permit application during the NEPA process.

Concurrent processing of NEPA and Section 404 issues is possible under existing regulations and is supported by agency early coordination policies. Furthermore, elements of the disposal site specification guidelines [Section 404(b)(1)] can facilitate determinations of viable alternatives by both the SHA and COE. For example, early identification of acceptable and unacceptable disposal sites under 40 CFR 230.80 may help determine which alternatives are "permittable" and which are not. An applicant also may gain further insight into the permitting possibilities of project alternatives through predevelopment consultation with Federal and State resource agencies. Such contact is part of early coordination and results in an indication of the resource agency position on each proposed alternative.

The incentive to the applicant is that this approach results in a degree of certainty, i.e., an indication from the COE regarding their ability to permit a certain action. As noted, this determination can reduce the risk which might otherwise be associated with waiting until the late stages of development to apply for the permit, particularly for controversial projects. The approach also benefits the COE in that it allows the COE to effectively contribute to the early development of highway projects which have potentially major aquatic impacts. The COE can be assured that any potential environmental issues are surfaced and addressed as part of both the highway alternative decisions and the permit review.

How Does It Work?

Design Information Requirements - There is a general perception that the permit process cannot be initiated during the NEPA process because not enough design detail is available during the environmental phase to satisfy the permitting agency. This perception fails to recognize that much of the review and analysis by the COE during the permit process does not require detailed design information. Nor does it

recognize the degree to which design may need to be advanced during the NEPA process in order to respond to environmental issues. The FHWA's regulations (23 CFR 771.113) require States to complete whatever engineering studies are necessary during the environmental phase to establish the project's environmental impacts and develop concepts for mitigation.

Advancing design in the NEPA process requires that bridge, hydraulic, and roadway design engineers must be involved early in the development of project concepts and continue to be involved as the concepts are refined. Project sponsors should advance design if details are needed to respond to environmental and related engineering concerns raised as part of the NEPA process or to address Section 404 issues in order to determine the early likelihood of being granted a permit.

Advanced design is most appropriate on projects with few build alternatives and subject to constraints of existing facilities. Often these are projects processed with an EA/FONSI or as a categorical exclusion. A good example is the widening of an existing highway embankment. The widening design, fill amounts and construction limits are largely defined by the size, location, and other features of the existing highway. Providing detailed information at an early stage should be easier with these types of projects than with projects on new alignment. Other site-specific constraints result from safety and design standards which designers must observe.

Early planning for projects on new location emphasizes routing of proposed alignments constrained by broad concepts such as purpose and need, environmental features and engineering feasibility. The SHAs usually complete detailed design after these routing decisions because specific detail is usually not necessary to address project location. Detailed engineering may subsequently cause reassessment and even alteration of location decisions, but major alignment changes most often result from issues other than facility design. Additionally, design for projects on new location is often readjusted several times as the project moves toward construction. Therefore, on these types of projects it may not be possible to generate definite design information early in the project development process.

The perception that sufficient highway design detail is not available during the NEPA process also fails to recognize the latitude which the COE district engineers have in determining the amount of detail necessary to initiate the consideration of permit issues. The SHA could initiate coordination with the COE District and the resource agencies with a letter containing preliminary information about the project. Preliminary information on project location, habitats affected, fill quantities, and facility design should be sufficient to focus attention on major Section 404 issues.

The COE districts receiving early information of this type must recognize the purpose of the preliminary contact. The intention at this stage is not to have all the detailed information necessary to

grant a permit. Instead, preliminary information provided with the letter is intended to direct COE and resource agency attention to Section 404 issues when such input is valuable to the evaluation of the selected alternative. Formal permit application occurs when more detailed information becomes available, possibly as part of the project final environmental document. By the time the SHA prepares the final environmental document, there likely should be sufficient information available to make a permit decision. Hopefully, since Section 404 issues are addressed during the project planning process, the selected alternative should not raise new or insurmountable permit issues. As the project design is refined, the SHA should continue coordination with the resource agencies, particularly on those elements related to project impacts and mitigation.

Advanced Identification of Discharge Areas - An early permit application also would require information on resources that may be potentially impacted. Information on suitable discharge sites and sensitive environmental features must be available for both the applicant and the permitting authority. For certain projects, a way to generate such information is through an advanced identification process. Section 230.80 of the 404(b)(1) guidelines allows the EPA and the COE to identify both suitable discharge sites and areas that should remain free of dredged or fill material. Determinations under the provisions of Section 230.80 should begin early in project planning so that the information will be available when the highway agency considers alignment alternatives. Choosing a preferred alternative should be easier if areas suitable for Section 404 permitting are known during the selection process. Another benefit of advanced identification is that it can be applied to more than one project in a given geographical area.

The advanced identification process, however, can be both very time consuming and costly. Highway sponsors, therefore, should consider its use only on major projects that potentially may affect large areas subject to Section 404 jurisdiction or on projects expected to generate substantial controversy. Such areas may involve important individual wetlands or complexes of high overall values, sensitive floodplain areas, and other valuable aquatic resources. The process may be particularly useful when highway projects are initially analyzed on a broad scale, corridor basis. Advanced identification may aid corridor selection or choices among alternatives within a corridor.

The advanced identification process may be initiated by the EPA, the COE, or any other party. If the FHWA or a SHA wishes to initiate advanced identification at a proposed project location, their request should be directed to the appropriate EPA Regional Administrator and the COE District Engineer. The EPA Regional 404 Coordinators and COE District staff will cooperate with representatives of the requesting agency and others, such as State and Federal resource agencies, to determine if advanced identification is appropriate in the area of the proposed project.

If appropriate areas are identified, the EPA Regional Office or the COE District Office will begin the advanced identification process by sending letters to the appropriate FHWA and State offices. This will normally occur during the NEPA scoping process or as soon thereafter as possible.

The regulation requires an appropriate public notice of the proposed advanced identification of areas as possible future discharge sites and those that are generally unsuitable for site specification. The timing of this notice is flexible. The most opportune time could be in combination with the Notice of Intent or other scoping notification, as discussed in Chapter 5.

Although it is not required, the public could be involved through a meeting to receive public and agency comments about an advanced identification study. A meeting would likely cover area boundaries, proposed analyses, offers to gather or supply certain types of information or participation, anticipated discharge activities and their specific locations, and landowner concerns. The public meeting could be held in conjunction with any other public meetings conducted by the SHA.

The EPA and the COE, as the Section 404 permitting agency, will evaluate the likelihood that the use of the area in question for the discharge of dredged or fill material complies with the Section 404(b)(1) Guidelines. If certain best management practices are required to make it possible to identify an area as a possible future discharge site, they should be specified in the advanced identification.

The COE District Engineer will maintain a public record of the identified areas and a written statement of the basis for identification. When the advanced identification is complete, a letter specifying the areas and stating whether they are possible as future discharge sites or not will be sent to the highway agency by the Section 404 permitting agency. Areas considered as possible future specified sites, may also have conditions limiting discharge of dredged or fill material.

The information in the written statement of the basis for advanced identification can be made available for inclusion in the EIS, and is expected to furnish the bulk of the material necessary to evaluate any subsequent Section 404 individual permit applications and general permit determinations.

The letter formalizing advanced identification sent from the COE to the SHA should be timed to arrive no later than distribution of the draft EIS for public comment. If that timetable is met, Section 404 permit application and evaluation could proceed expeditiously with confidence that all concerned individuals and agencies have had an opportunity to contribute, and that representatives of EPA and the COE have been involved throughout the process.

Integrating NEPA and Applications for Individual Permits - Applying for an individual Section 404 permit during the NEPA process should be rather straight forward. The normal requirements for submitting a permit application are followed. The complicated aspects, however, involve the timing of the application. The SHA can submit the permit application only after sufficient information is available concerning the proposed project and the affected environment. Therefore, the application can occur as early as the information is available. The other important aspect of permit timing involves the duration of the authorized work. If application is made during the NEPA process, starting and completion dates should be specifically tailored to fit the SHA's estimated construction schedule.

The following outline describes a method to initiate Section 404 applications during the NEPA process. The method is presented as an example procedure resulting in application at or following the point in the NEPA process where either an EA is made available for review or an draft EIS is circulated for comment.

1. During scoping, the SHA specifically requests comments from the COE and the resource agencies concerning Section 404 permit possibilities, applicable resource information, and the need for additional environmental studies. Inputs from the resource agencies regarding fish and wildlife resource values are most beneficial to the SHA prior to the selection of the preferred alternative. Important and sensitive habitats are highlighted and can be targeted for mitigation. The SHA requests advanced identification determinations, if appropriate. Also, the COE and other appropriate agencies are requested to be cooperating agencies at this time.

2. The SHA provides Section 404 information generated by environmental studies during scoping to the COE and the resource agencies when the EA is available for review or when the draft EIS is circulated for comment. The SHA may also find it advantageous to supply the information at an earlier time, such as with a predraft document. If it is clear that there are few build alternatives available for consideration at this point and sufficient information exists for a permit application, the SHA may apply to the COE. Sufficient design detail would include project location, estimated fill quantities, and cross section sketches. The information also should include wetland types to be affected, acreage, possible mitigation, and comments received from the scoping request during Step 1.

3. The EA notice of availability or draft EIS notes that Section 404 information was submitted concurrently to the COE, thereby alerting the concerned agencies to direct comments to both Section 404 and NEPA issues. If a permit application was made, separate mention of this information is

not necessary. The SHA should provide copies of EAs to the resource agencies who will be commenting on the permit application.

4. Notices for hearings on the environmental document and Section 404 permit notice can be combined if a permit application is submitted when the draft EIS is circulated or EA made available. If the application will come later, combined hearings are not appropriate. However, the SHA and FHWA should request that the COE attend and observe the highway public hearing. (See Chapter 6)

5. During the period when the SHA and FHWA are considering the comments received on the draft NEPA document, the COE will process the permit application if submitted as indicated in paragraph 2 above.

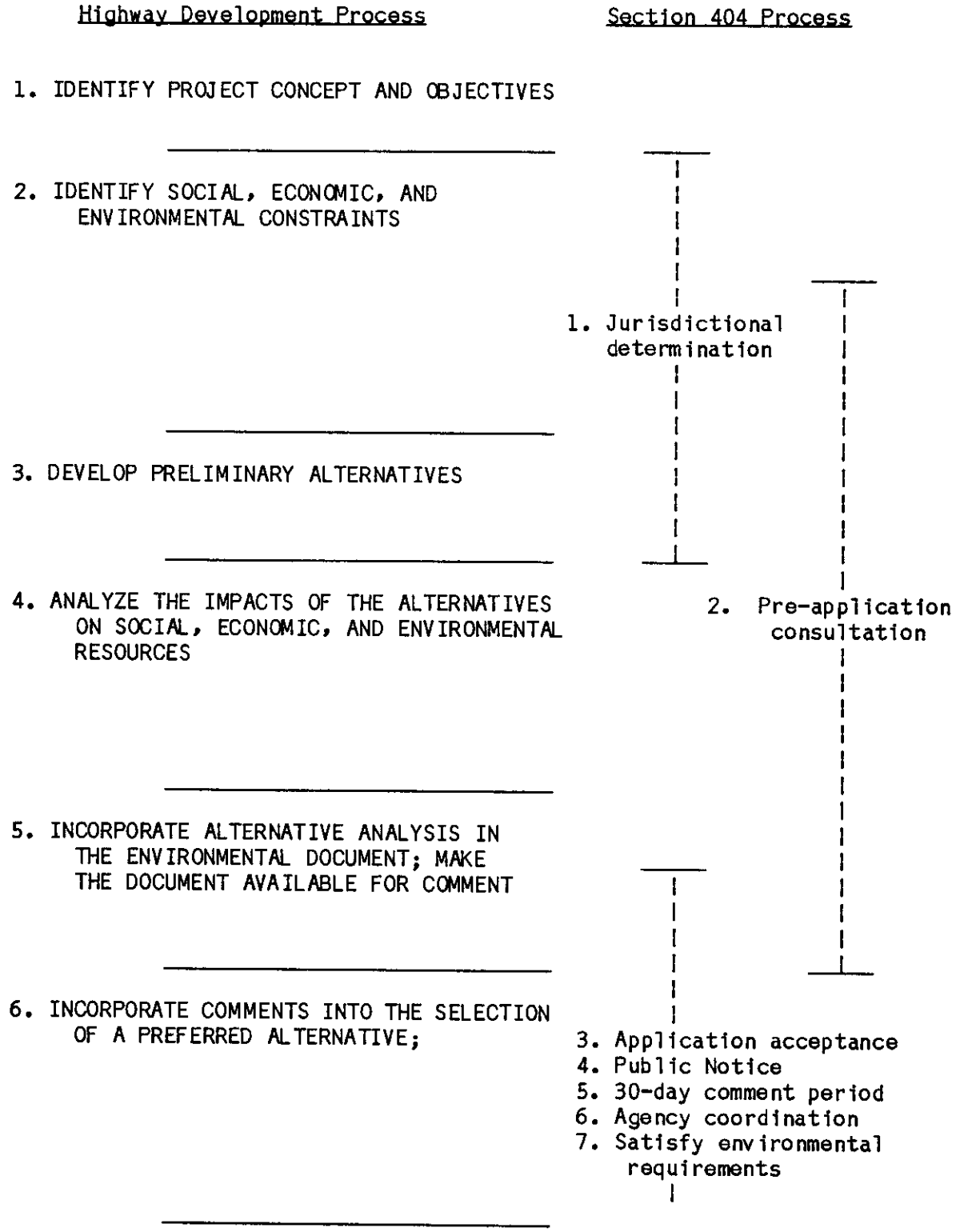
6. If the application will occur later, the COE will consider scoping comments from the resource agencies, any advanced identification of suitable disposal sites, results of other environmental studies, and pertinent design information to prepare comments on each alternative. A priority ranking from most likely to the least likely to be permitted could be provided. Possible permit conditions also may be included as appropriate.

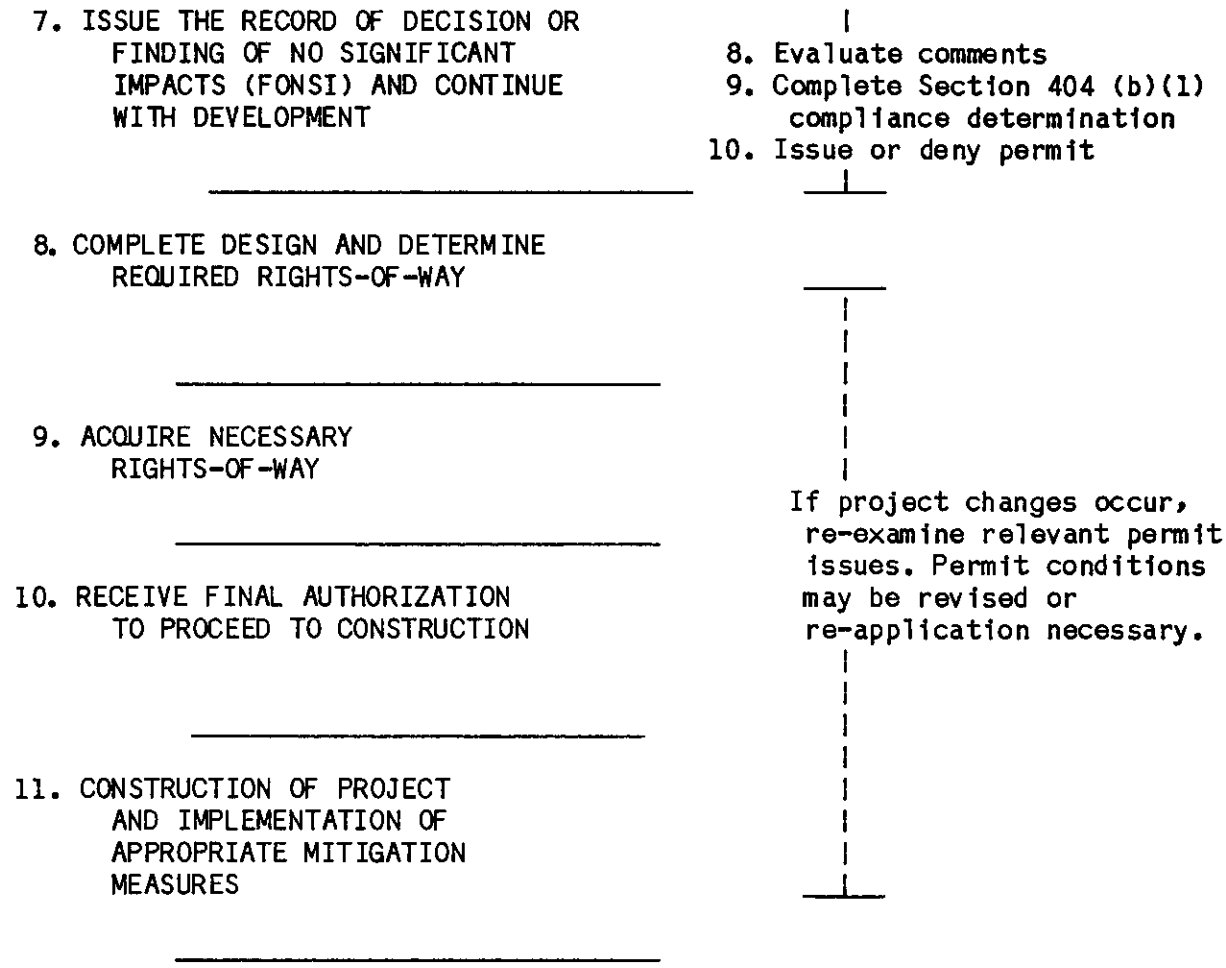
7. The SHA and FHWA will consider the COE and resource agencies comments when selecting the alternative to be presented in the final environmental document as the intended action. The final document should contain responses to Section 404 permit comments and discussion of commitments affecting a permit application. Commitments should include mitigation features (such as potential mitigation sites) which are appropriate and practicable as well as an indication by the COE and the resource agencies that the analysis of project alternatives is sufficient to satisfy Section 404 application requirements.

8. If not done earlier, the SHA submits the permit application when the final environmental document is prepared or as soon as sufficient design is available to satisfy the information requirements of the COE. Revisions to the permit application or possible reapplication to the COE may also be needed if subsequent design changes are made. Such changes may require readvertisement of a public notice for the permit application.

9. After the environmental process is complete, the COE can adopt the FHWA document and issue the Section 404 permit. The length of time after approval of the final document and before the permit will vary. On projects processed with an EA/FONSI the permit may be issued concurrently with the signed FONSI. On EIS projects 30 days must elapse before the Record of Decision can be signed and a permit issued.

Possible Integrated Steps of
The Federal-aid Highway Development and
Section 404 Permit Processes




7. ISSUE THE RECORD OF DECISION OR FINDING OF NO SIGNIFICANT IMPACTS (FONSI) AND CONTINUE WITH DEVELOPMENT
8. COMPLETE DESIGN AND DETERMINE REQUIRED RIGHTS-OF-WAY
9. ACQUIRE NECESSARY RIGHTS-OF-WAY
10. RECEIVE FINAL AUTHORIZATION TO PROCEED TO CONSTRUCTION
11. CONSTRUCTION OF PROJECT AND IMPLEMENTATION OF APPROPRIATE MITIGATION MEASURES
8. Evaluate comments
9. Complete Section 404 (b)(1) compliance determination
10. Issue or deny permit
If project changes occur, re-examine relevant permit issues. Permit conditions may be revised or re-application necessary.